

# THE AMERICAN

## ELEVATOR AND

# GRAIN TRADE

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One Dollar Per Annum  
SINGLE COPIES, 15 CENTS

VOL. XXXIX.

431 South Dearborn Street, Chicago, Ill., January 15, 1921

NO. 7

WE ARE PROGRESSIVE ENOUGH  
TO BE AGGRESSIVE FOR YOU

**McKENNA & DICKEY**  
Grain

60 BOARD OF TRADE

For your  
Business Sake  
Communicate

**HARRIS, WINTHROP & CO.**

15 Wall Street, New York

The Rookery, Chicago

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OF

**Clover**

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**Timothy  
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Mail Samples for Top Market Bids

**Milwaukee  
Seed Company**

MILWAUKEE, WIS.

Established 1877

**LANGENBERG BROS. GRAIN CO.**  
**GRAIN and HAY**

We Solicit Your Consignments

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**THE ILLINOIS SEED CO.**  
**GRASS SEEDS FIELD**

BUYERS CHICAGO SELLERS

Ask for Samples

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TIMOTHY, CLOVERS, ALSIKE, ALFALFA, MILLETS, RED-  
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PNEUMATIC GRAIN CONVEYORS  
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**The WAGNER**

Covers all markets. Ask for the weekly or  
daily issue. Has the largest circulation of any  
grain literature.

Stocks E. W. Wagner & Co. Bonds  
Grain Members New York Stock Exchange  
Members New York Cotton Exchange  
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**LETTER**

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CHICAGO

**COURTEEN SEED CO.**

Specialize in all

**GRASS AND FIELD SEEDS**

SHIPPERS. Send Samples for Bid.  
BUYERS. Ask for samples and prices.

MILWAUKEE, WISCONSIN

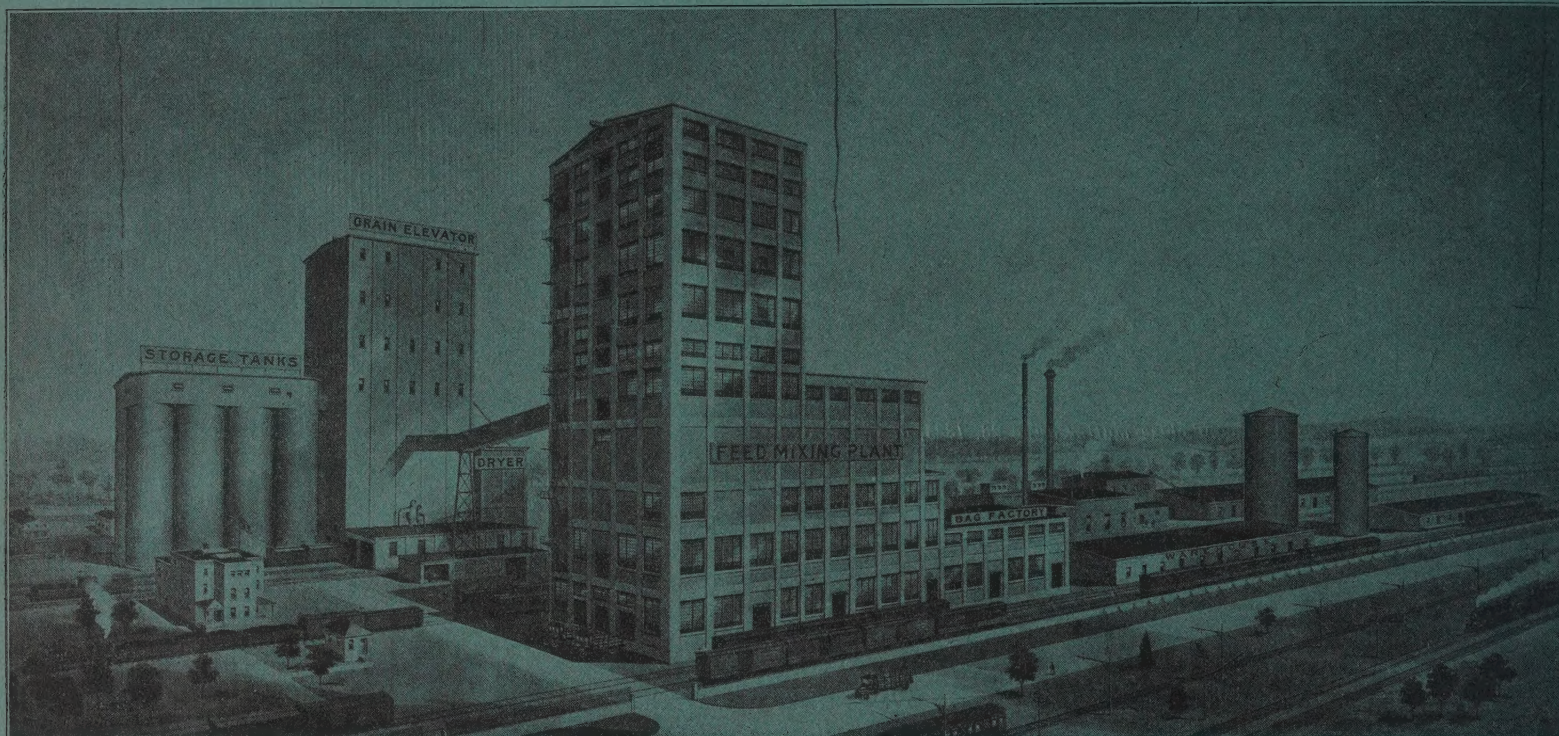
**BACHE SERVICE**

USE IT  
ON

**GRAIN AND SEEDS**

Chicago, Ill.

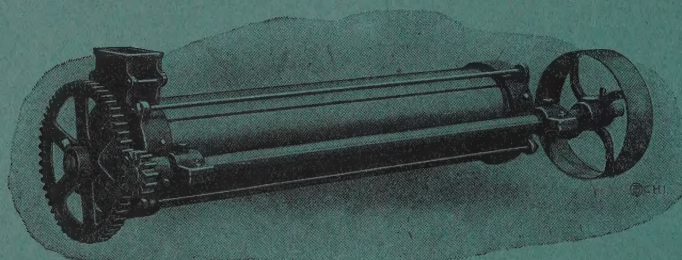




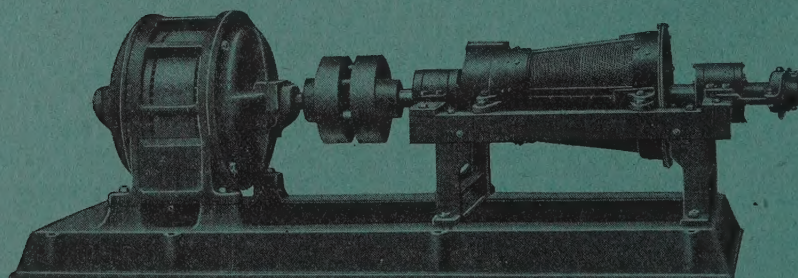
AMERICAN MILLING COMPANY'S PLANT, PEORIA, ILL.

This plant is equipped with BEALL Degerminating Units, as are all other large corn milling plants in this country and abroad.

Each Unit consists of the Steamer and Degerminator, as shown below.



BEALL HORIZONTAL CORN STEAMER



BEALL DEGERMINATOR—MOTOR DRIVEN

We manufacture degerminators for belt drives also, equipped with ring-oiling or ball bearings.

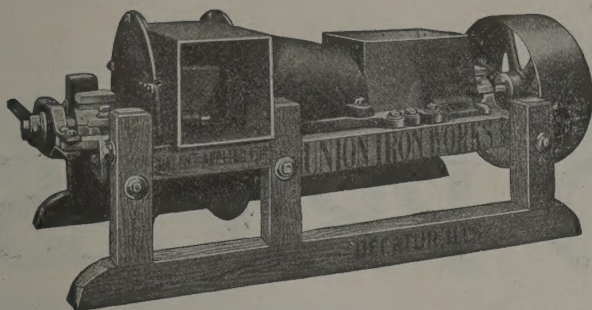
Our line comprises complete Corn Milling Equipment.

*Write for our new catalog—No. 22*

**BEALL IMPROVEMENTS COMPANY**  
**DECATUR, ILLINOIS**



# Start the Year Right



"Western" Pitless Sheller

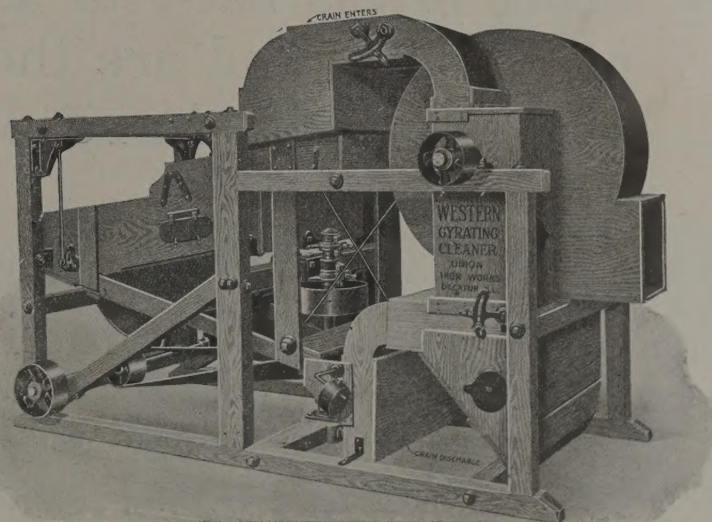
Make the year 1921 a memorable one by getting a good start. This will include the WESTERN LINE as your machinery equipment.

With this line installed, you will be able, other things being equal, to look back from the close of 1921 to a successful year's business.

*Western Equipment is never beaten,  
seldom equalled*

The line includes

Shellers	Conveyors
Cleaners	Manlifts
Car Loaders	Link Belting
Buckets	Pulleys
Boots	Shafting
Elevator Heads	Clutches
Feed Mills	Distributors
Spouting	Car Pullers
Turnheads	Couplings
Gears	Etc., Etc.
Belting	



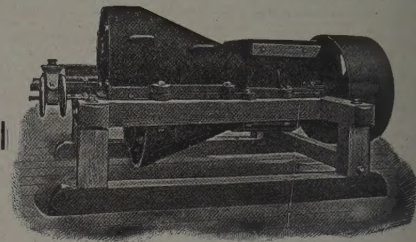
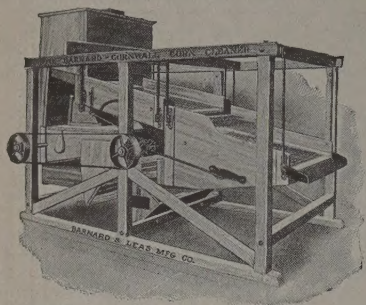
"Western" Gyrating Cleaner

## UNION IRON WORKS

### DECATUR, ILLINOIS

*Complete Line of Shellers and Cleaners Kept at*  
1400-1402 West 12th Street KANSAS CITY, MO.





We Have

# REDUCED PRICES

On everything needed for the  
Flour, Corn and Feed Mill  
and Grain Elevator

because we feel it our duty to help  
bring prices back to as near normal  
as possible, and are therefore willing  
to accept our share of the losses.

Get your plant in shape now for  
big business by letting us supply  
your needs.

SHIPMENTS MADE PROMPTLY



**BARNARD & LEAS MFG. CO.**

MILL BUILDERS AND  
MILL FURNISHERS

ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.





# Morse Silent Chains

For All Types of Power Transmission  
Positive as a gear—Flexible as a belt

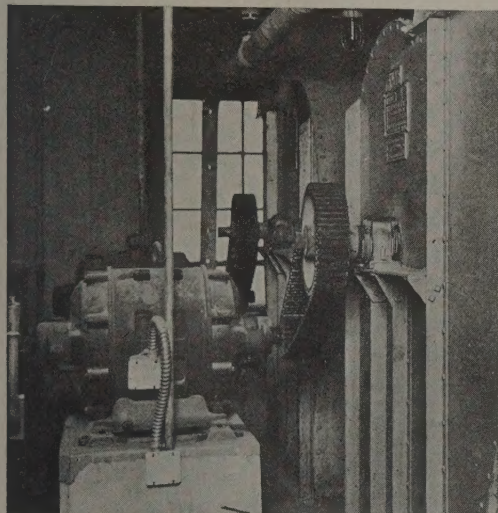
Morse frictionless "Rocker Joint" silent chains and sprockets.



99 Per Cent Efficiency

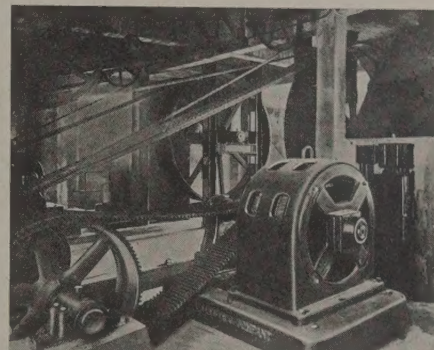
High speed, positive, flexible drives for large or small power transmission.

All so-called "silent chains" are to all appearances very much alike. Each consists of a steel belt of flat steel links, so shaped that when set on edge and assembled in numbers to give a desired length of chain, rows of teeth are formed on one side to engage the teeth on the sprockets.



Morse Drives on Elevator Legs

Morse chains differ in that unseen but all important part, the joint. On it rests the burden of service in any chain. The Morse is constructed with this in view.

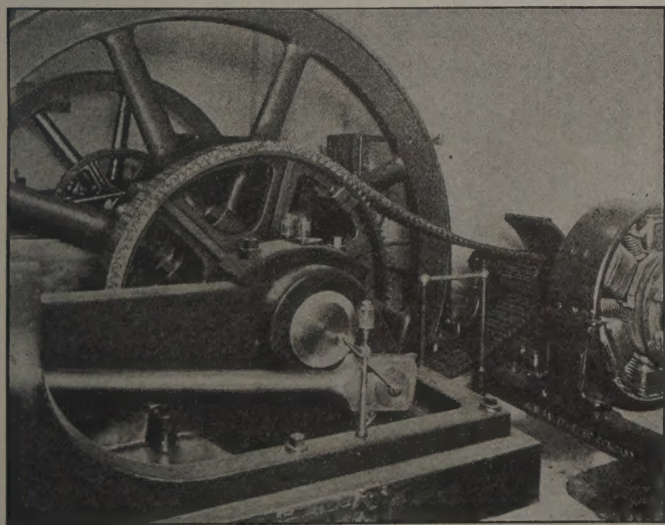


Drive in C. & N. W. Elevator at Milwaukee

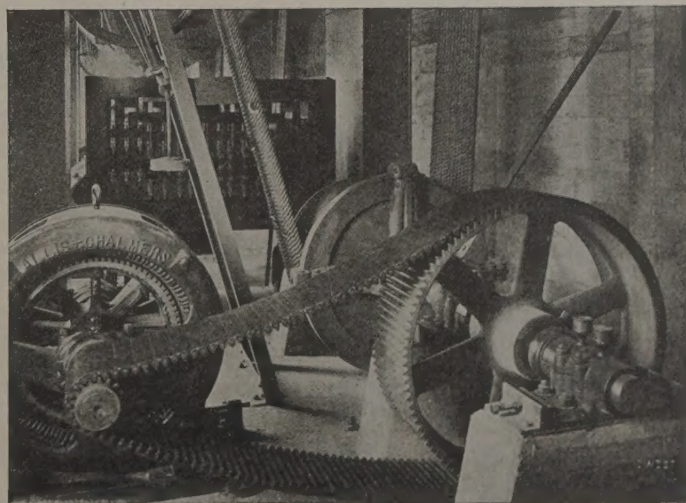
Our bulletins give detailed description of chain and joint construction—also valuable chain and sprocket engineering data. Sent free upon request.

## Engineering Service

Our corps of engineers with years of experience in installing chain drives, will assist you in solving your transmission problems. It will entail no obligation on your part. Get in touch with them now.



200-Horsepower Elevator Drive



100-Horsepower Drive in Soo Line Terminal Elevator

**MORSE CHAIN COMPANY**

Largest manufacturers of  
Silent Chains in the World  
WRITE FOR BOOKLET

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"MORSE" IS THE GUARANTEE ALWAYS BEHIND THE EFFICIENCY, DURABILITY AND SERVICE



# CINCINNATI

The Central Distributing Point for Grain and Hay



Home of the Cincinnati Grain and Hay Exchange

## A Few Reasons Why Shipments of Grain and Hay to Cincinnati Pay Best

First.—It has the "square deal" plugging system for hay.

Second.—It has reconsignment and transit privileges as well as other favorable points necessary to the most successful handling of grain or hay shipments.

Third.—As the terminal points for 200,000 miles of railways it is a convenient shipping point for the country dealer, and local buyers are enabled to distribute all products quickly and to best advantage.

Fourth.—The market embraces in its membership young, energetic, and capable grain merchants, who are at all times working indefatigably for the interest of their patrons.

*Ship your grain and hay to any of the following representative and responsible grain merchants, all members of the*

## Cincinnati Grain & Hay Exchange

A. BENDER, Flour, Grain and Feeds  
BINGHAM-SCHOLL GRAIN CO., Grain Exclusively  
BROUSE-SKIDMORE GRAIN CO., Grain, Hay, Feed  
W. L. BROWN & CO., Grain and Hay  
COSTELLO GRAIN & HAY CO., THE JOSEPH F.,  
Hay and Grain  
THE D. O. CROSS CO., Grain, Hay, Mill Feeds  
DE MOLET GRAIN CO., Grain and Hay

DORSEL GRAIN CO., Grain and Hay  
EARLY & DANIEL CO., Hay, Grain, Feed  
FITZGERALD BROS. CO., Grain and Hay  
GALE GRAIN CO., THE A. C., Grain and Hay  
DAN B. GRANGER & CO., Hay and Grain  
MUTUAL COMMISSION COMPANY, Strictly Commission  
THE NUTRITIA COMPANY, Feeds

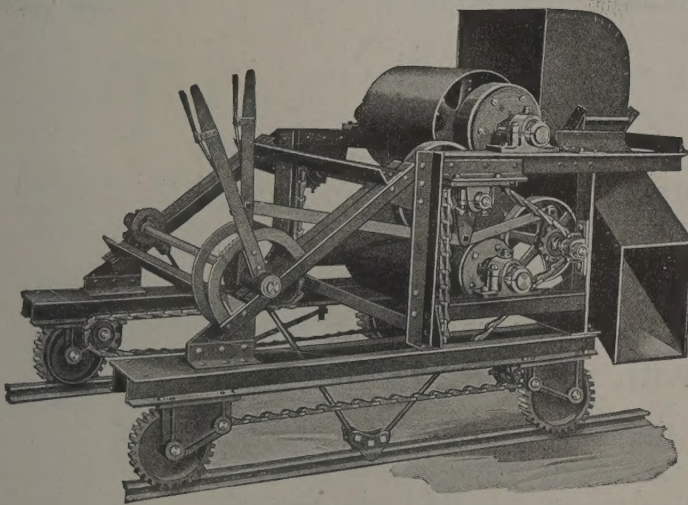




Trade Mark of Quality

# MODERN GRAIN ELEVATOR EQUIPMENT

## WELLER HEAVY DUTY SELF PROPELLING TRIPPERS (PATENTED)



### IN A CLASS BY THEMSELVES

Embodies features not found in any other  
Fully protected by patents

Impossible for the belt to catch in the friction and  
cause an accident

Large pulleys help to add to the life of the belt, while the wide clearance on each side of the belt and the arrangement of the double friction being such that it is practically impossible for the belt to catch in the friction.

Weller's Trippers are doing duty in some of the largest elevators. They have stood the test.

Every Elevator Should Be Equipped  
with  
Weller Continuous Grain Dryers and Coolers

### FOR YEARS

The Weller Manufacturing Company have specialized in the design and manufacture of modern equipment—the better kind—for the mill and elevator.

It is a matter of pride with us that customers who have put Weller made equipment to the test when enlarging or building additions to their plants specify our goods.

### Endurance Is the Test of Quality

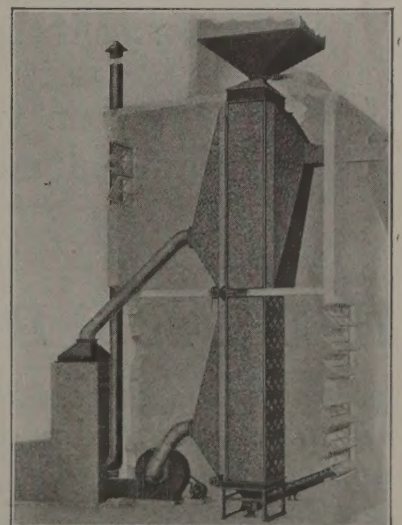
Weller Made Equipments Will Stand the Test

Send Us Your Orders for

Belt Conveyors, Drag Conveyors, Pan Conveyors, Ribbon Conveyors, Spiral Conveyors, Elevator Buckets, Bucket Elevators, Elevator Heads, Elevator Boots, Elevator Casings, Power Shovels, Distributing Spouts, Car Loaders, Car Unloaders, Car Pullers, Wagon Dumps, Truck Dumps, Grain Driers, Rope Drives, Friction Clutches, Pulleys, Hangers, Bearings, Gears, Weller Made Steel Chain, One Man Elevators.

Encourage the Farmer to come to your elevator and help your community by installing a Weller Continuous Grain Dryer and Cooler. Take care of the crop in off seasons when the damp, rainy, muggy weather sets in before the grain has matured. Many a farmer has been ruined and the elevator has lost money by not being properly equipped to take the moisture out of the grain.

The Weller Dryers and Coolers will do the work. They are built on scientific principles and will meet the requirements of the small country elevator or the large terminal houses and mills.



Weller Continuous Grain Dryers  
Bulletin No. F101  
"Scientific Methods of Drying Grain"  
Sent on Request

## WELLER MFG. CO. CHICAGO

New York

Boston

Baltimore

Pittsburgh

San Francisco

Salt Lake City





The dynamic character of the Indianapolis market reaches to all receiving centers, making it the logical shipping point from central territory.

It attracts grain from the vast central arable plains and has proper connections with excellent billing facilities to all points, East, West, North, South.

The location and natural advantages of Indianapolis as a grain receiving and shipping center, therefore, makes it the best market in the country.

Ship your grain and hay to any of the following firms, all members of the

## INDIANAPOLIS BOARD OF TRADE

BIG FOUR ELEVATOR CO., Merchandisers of Grain  
 BINGHAM-HEWETT-SCHOLL CO., Grain Merchants  
 BELT ELEVATOR & FEED CO., Grain Commission  
 BERT A. BOYD GRAIN CO., Grain Commission  
 CLEVELAND GRAIN & MILLING CO., Grain Commission  
 THE EARLY & DANIEL CO., Grain Commission  
 Merchants and Buyers  
 WM. R. EVANS GRAIN CO., Brokers and Commission  
 P. M. GALE GRAIN CO., Grain, Feed  
 HEINMILLER GRAIN CO., Receivers and Shippers  
 HAYWARD-RICH GRAIN CO., Commission, Brokerage

LEW HILL GRAIN CO., Strictly Commission  
 H. E. KINNEY GRAIN CO., Receivers and Shippers  
 LAMSON BROS. & CO., Grain, Seeds  
 McCARDLE-BLACK CO., Grain Merchants  
 CARL D. MENZIE GRAIN & BROKERAGE CO., Brokers  
 and Grain Commission  
 MERCHANTS HAY & GRAIN CO., Hay, Grain, Feed  
 NATIONAL ELEVATORS, Every Branch of the Grain  
 Business  
 STEINHART GRAIN COMPANY, Grain Commission  
 URMSTON GRAIN CO., Grain Commission  
 FRANK A. WITT, Grain Commission and Brokerage



# Enlightened Self-Interest

*MR. FARMER, you owe it to yourself and your purse to understand thoroughly the present system of marketing your crops. Many plans are proposed to you. First, study the one that has stood the test of seventy years and which brought order out of chaos previously existing. Simply send your name and address to Room 717 Board of Trade, Chicago, and receive the booklet "Things You Should Know About the Board of Trade" with its interesting chapters on hedging, speculation and other matters of vital interest to those who grow or handle grain.*

THAT business is best conducted which is inspired by an enlightened self-interest. This is the secret of the position attained by the Board of Trade of Chicago, most influential of the world's grain markets, and by the grain exchange system of the United States in general.

THE remarkable economy of the present system of marketing grain was not invented; it developed through several generations in the keen competition of great market centers for the trade of the world. Waste of a fraction of a cent in the handling of grain would in a year of abundant crops turn buyers to markets where that fraction was saved. Thus the saving is a matter of enlightened self-interest by which producer and consumer alike benefit.

THE Board of Trade of Chicago has led in the development of a system which for influence, economy, efficiency and fairness to all, finds no superior in history. Any practical plan of marketing must include the essentials of its processes for weighing and inspection of grain, for storage and reclamation; for buying and selling against future requirements; for credit; for an open meeting place for buyers and sellers; for the collection of information and statis-

tics; for the risk of ownership of surplus crops now assumed by the little-understood speculator; for the year-round market and the stabilization of prices.

THERE is abundant testimony to these facts from courts, legislative and industrial committees and economists. Herbert Hoover said to congress during the stress of the war that the Chicago Board of Trade was the most economical agency in the world for the distribution of food-stuffs. Judge Grosscup in the Federal court in a decision relating to the legitimate establishment of boards of trade said:

"They balance like the governor of an engine the otherwise erratic course of prices. They focus intelligence from all lands and the prospects for the whole year by bringing together minds trained to weigh such intelligence and to forecast the prospects. They tend to steady the markets more nearly to their right level than if left to chance and unhindered manipulation."

OF speculation as represented by the speculator who assumes the risk of ownership of surplus crops, the Supreme Court of the United States commented:

"Speculation of the kind by competent men is the self-adjustment of society to the probable. Its value is well known as a means of avoiding or mitigating catastrophes, equalizing prices and providing for periods of want."



# THE BEST ON THE MARKET!

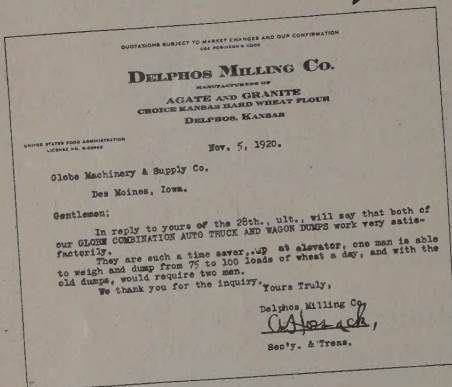
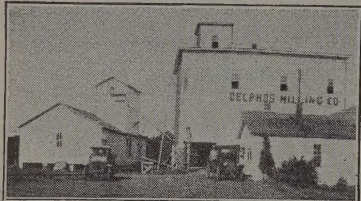
## *Globe Combination Auto Truck & Wagon Dump*

### SIMPLE - RELIABLE - PRACTICAL

(SPENCER PATENTS FEB. 1919)

## FOR ANY MILL OR ELEVATOR

HERE ARE TEN GOOD REASONS WHY YOU SHOULD BUY A GLOBE!



1. It is impossible to have an accident.
2. It is a time saver.
3. It is a money saver.
4. It is a labor saver.
5. It can be installed with any type, size or make of scale or independent of scale.
6. It is simple.
7. It is durable.
8. It will increase your business.
9. It is regularly inspected by our service men.
10. IT IS BACKED BY A RESPONSIBLE ESTABLISHED HOUSE. Twenty-seven years in business.

Stop wasting your time, money and energy by unloading vehicles in the old way.

You can't go wrong in sending us an order for a Globe Dump.

Our customers are numbered from the largest mills, elevators and line houses to the smaller plants, and the foremost contractors in the states.

Our service department is at the command of our users, to see that every Globe installation gives the same perfect service.

We solicit your inquiries and will be glad to send you blue prints, literature and prices, and a list showing the names of hundreds of Globe boosters.

We make prompt shipments.

Manufactured by  
**Globe Machinery & Supply Co.**  
Des Moines, Iowa.

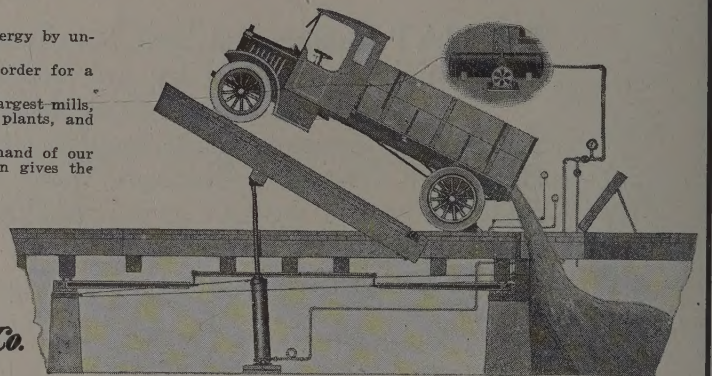
**TRUCKS**  
**DUMPS** **WAGONS**  
**SLEDS** on the one platform. Into the same Pit-Hole.

It is the easiest, safest and quickest way to dump grain hauling vehicles.

The wonderful tilting power cylinder enables you to double your dumping efficiency at the one cost.

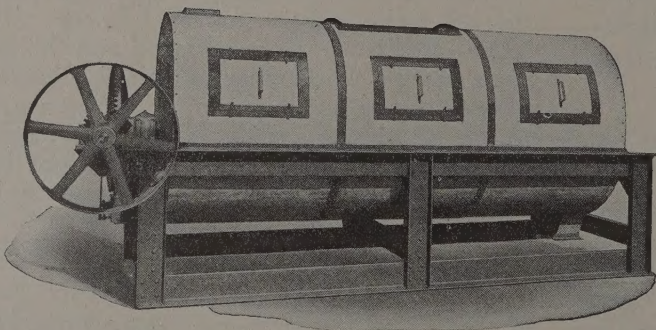
It is simplicity itself—a powerful air arm doing your work for you. You simply turn a valve in your driveway, and the Globe Dump does the work.

No other dump on the market so mechanically perfect, so satisfactory to operate.



## The ELLIS ROTARY DRIER

### BALL BEARING



NO. 5—TYPE "A" ROTARY DRIER

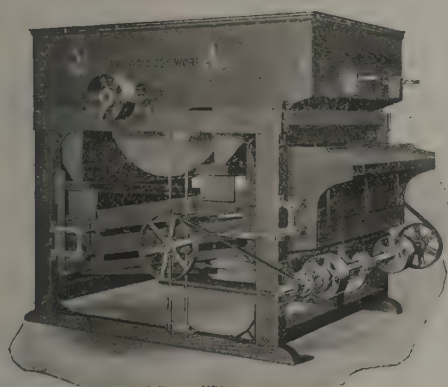
to-date 20 repeat orders for Ellis rotary driers and cookers. That in itself is convincing evidence of superiority. So much so in fact that you owe it to yourself to investigate our claims, namely—That we are producing a high grade machine of utmost dependability and one which has no counterpart on the market today.

THE unretouched photograph shows an Ellis No. 5 Ball Bearing Enclosed Type Rotary Drier. It was built for special service and is considerably shorter than our standard machines.

One of the largest and oldest users of rotary driers has placed

The Ellis Drier Company, 332 South La Salle St., Chicago, U. S. A.





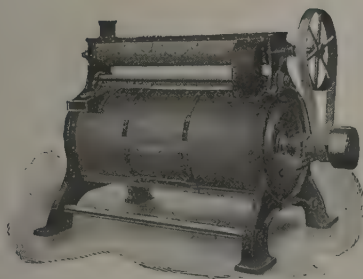
## THE ELEVATOR'S PROFITS

The Managers of Elevators depend largely upon the proper buying of grain for their profits. When they can buy clean plump wheat, the profits are certain. But when wheat comes to the elevator full of wild seeds, shriveled grains, sand and contaminated by smut and other fungus productions, the manager is at a loss to know how to buy.

With the Wolf-Dawson Wheat Washer and Elevator Receiving Separator, the Manager can make a quick turnover on nice clean wheat.

Remove the coarse material, foul weed seeds, sand, etc., with the Wolf Elevator Receiving Separator. Then wash the smut from the crease beard, and germ of the wheat berry with the Wolf Dawson Wheat Washer and spout the grain directly into the car. The profits are **most satisfactory**.

If you are interested in bigger profits from handling grain, write for Bulletins 77-M and 94-M.



## THE WOLF COMPANY

Chambersburg, Pa.

## ELIMINATE YOUR DIFFICULTIES

**in truck dumping.** Have a **TRAPP COMBINATION TRUCK and WAGON DUMP**, or a **TRAPP AUTO-TRUCK DUMP** installed in your elevator; and your troubles and difficulties in handling long, and short, light, and heavy, auto trucks, as well as wagons, will be at an end.

### In addition

you can dump all vehicles with absolute safety; with all danger of accidents removed; because your **TRAPP DUMP** would be entirely under the control of the air-valve operator every minute during the use of the dump.

### Instead of using

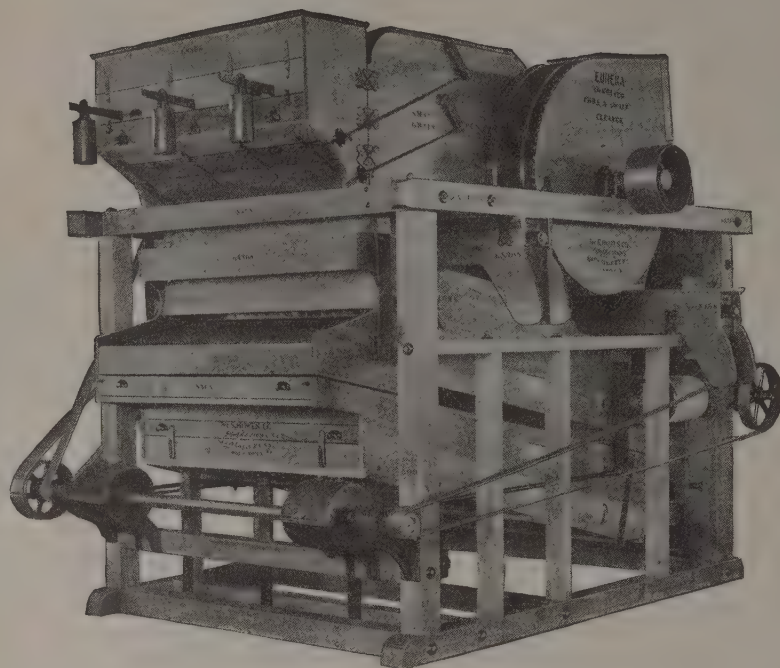
a dangerous inclined plane-platform, upon which trucks must be driven under their own power in low gear, undergoing the danger of driving off at the other end, or off at one side, in the **TRAPP DUMPING SYSTEM** we use a horizontal dump-lift platform upon which the front wheels of the trucks are driven. The **TRAPP DUMP-LIFT** is elevated by means of compressed air power, the **cheapest power known**.



WRITE AND GET FULL PARTICULARS regarding prices, operation, and installation.

**Trapp-Gohr-Donovan Company,**  
1125-27-29 No. 22nd St. Omaha, Nebraska





## THIS NEW EUREKA for Cleaning CORN and SMALL GRAINS is A Masterpiece of Efficiency!

We purposely ask you to forget any preconceived standards you may have had of efficiency, because we believe this Cleaner is going to sweep aside every precedent of desirability that you may have had of any machine designed for a like purpose.

This, our latest offering, represents the utmost in highly developed knowledge and skill.

*Write for special bulletin*

**S. HOWES CO., Inc.**  
Eureka Works      Silver Creek, N. Y.

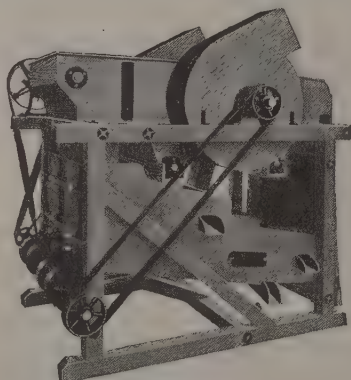


**Eureka**  
Service Satisfies



### REPRESENTATIVES

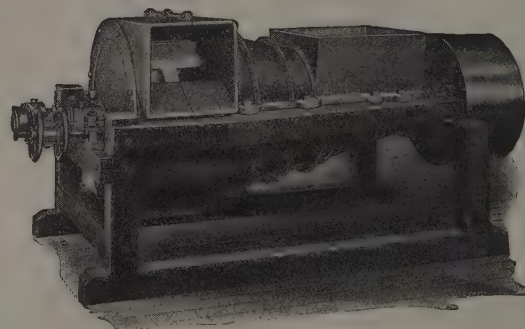
William Watson, Room 415, 111 W. Jackson Blvd., Chicago, Ill.  
Geo. S. Boss, Osburn House, Rochester, N. Y.  
J. E. Gambrill, 749 E. Church St., Marion, Ohio.  
W. M. Mentz, General Delivery, Sinks Grove, W. Va.  
J. O. Smythe, 3951 Broadway, Indianapolis, Ind.  
F. E. Dorsey, 3850 Wabash Ave., Kansas City, Mo.  
J. P. Stoffel, 1042 Hyperion Ave., Los Angeles, Calif.  
The Brinkley Company, Seattle, Wash.  
C. J. Groat, 522 Board of Trade Building, Portland, Oregon.



U. S. Twin Shoe Receiving Separator



Constant  
Safety  
Ball-Bearing  
Man-Lift



U. S. Corn Sheller

## The Reconstruction Period

finds us prepared in all respects to meet the wants of the grain trade in our usual efficient manner with prices to meet the new conditions. Quality has been and will continue to be our motto.

### CONSTANT GRAIN ELEVATOR MACHINERY

is known the world over as the best machinery procurable for grain elevator work. We shall maintain this reputation throughout 1921.

*Write for our late catalog*

**B. S. CONSTANT MANUFACTURING CO.**  
BLOOMINGTON      -      -      -      -      -      -      ILLINOIS

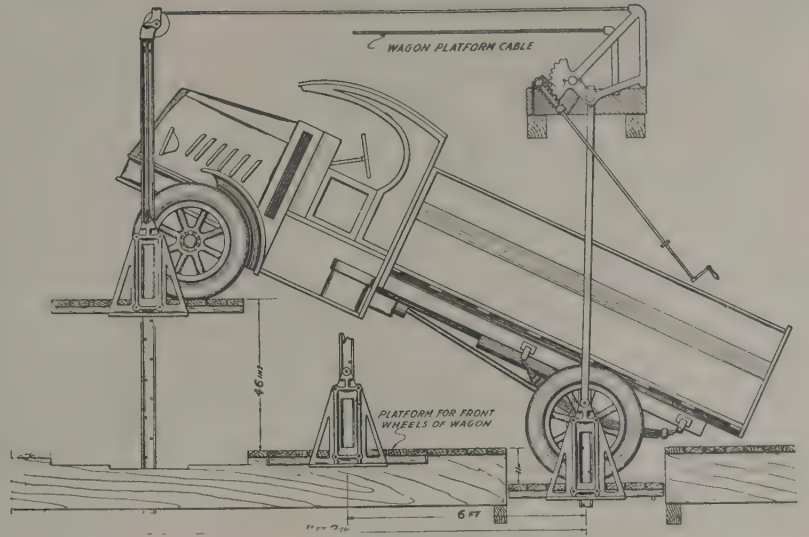


## THE DOMINANT IDEA

The TRUCK DUMPING SYSTEMS in use today are as the earliest type of automobiles and aeroplanes. The dominant idea today tends towards power and labor-saving machinery.

Saving of power; dependability, quick action—all are combined in the NIPP GRAVITY TRUCK DUMP. Gravitation is one of nature's greatest elements. The earth itself is moved by gravitation.

Your loaded truck and wagon can be tilted and unloaded and brought back to proper position by GRAVITATION. Those who today are struggling with a power-driven device will be the first to let their wise judgment make the comparison.



*Write for explanation in detail, circulars and prices*

### Puritan Mfg. & Supply Co.

MANUFACTURERS

1014 North 17th Street

Omaha, Nebraska



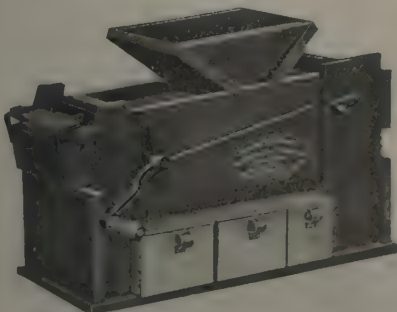
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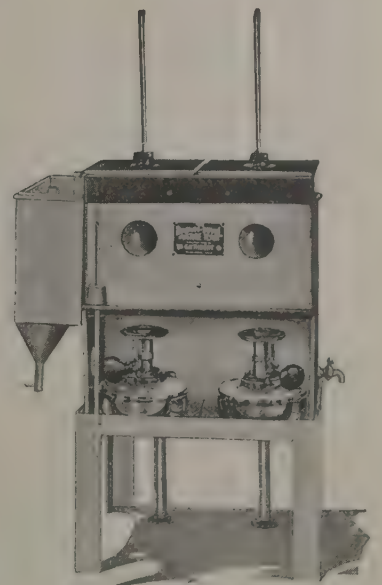
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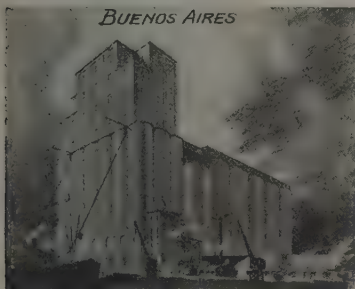
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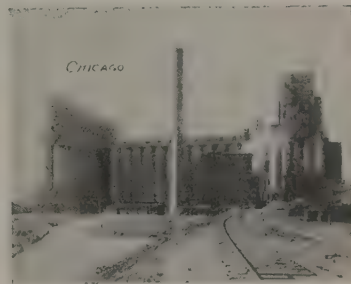
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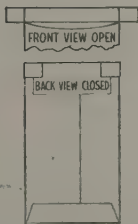
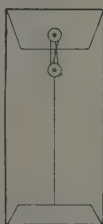


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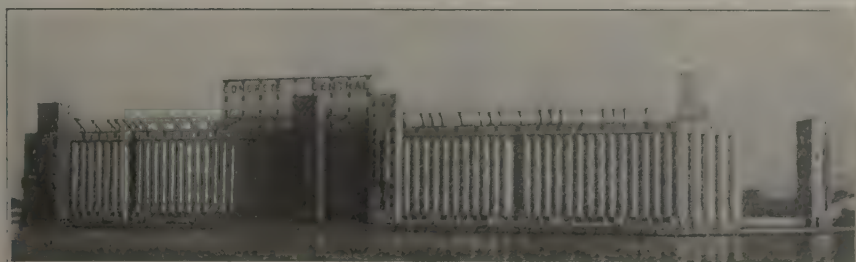
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Portland Flouring Mills Company  
Northern Central Elevators (Pennsylvania Lines, Baltimore, Md.)  
Russell-Miller Milling Company

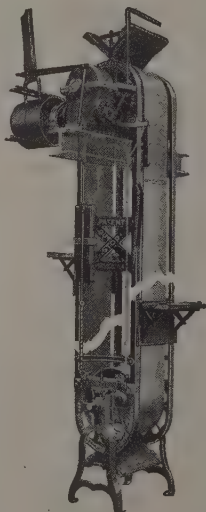
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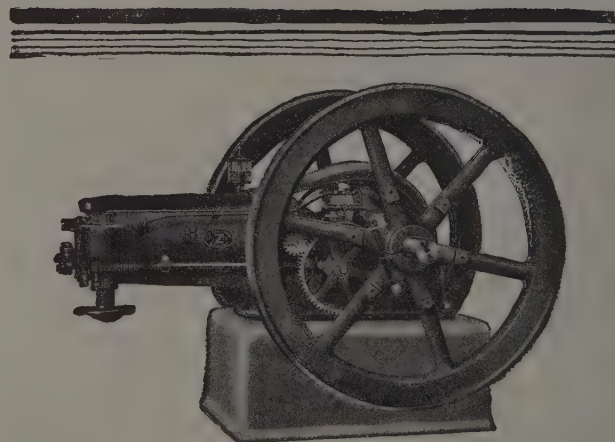
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Makers of Single Disc Mills, Centrifugal Bolt-  
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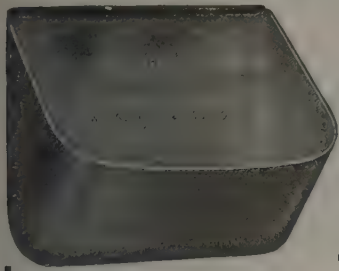
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Helicoid conveyor is well adapted to the handling of grain and all milling products; cotton seed and cotton seed products, fertilizers, sugar, starch, rice, coal, ashes, cement, concrete, phosphate, sawdust and many other articles.

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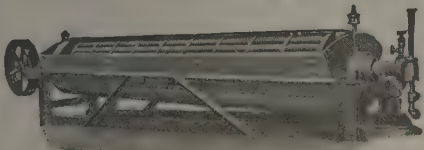
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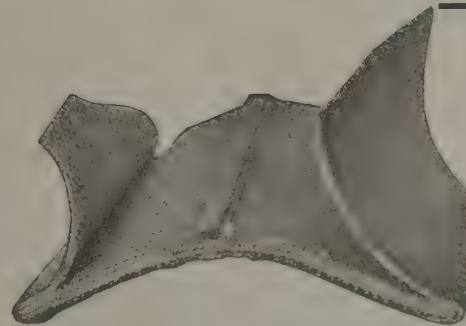
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Figure it out yourself!

"R. F. & C." is a rubber belt—that cannot open in the plies nor split in the seams—will transmit full power with minimum stretch—can be used until worn out in service—

IS NOT THAT THE RUBBER BELT YOU WANT to know more about? Send for sample and full information about "R. F. & C." patented Non-Separable Rubber Belt.

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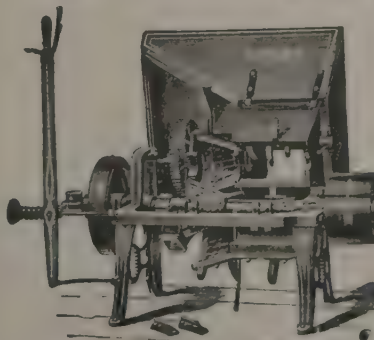
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One trial will convince you of its greater economy in service.

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is the only device offered the grain shipper that makes a car Leak-Proof. Cheap—Modern—Profitable. Write now for particulars.

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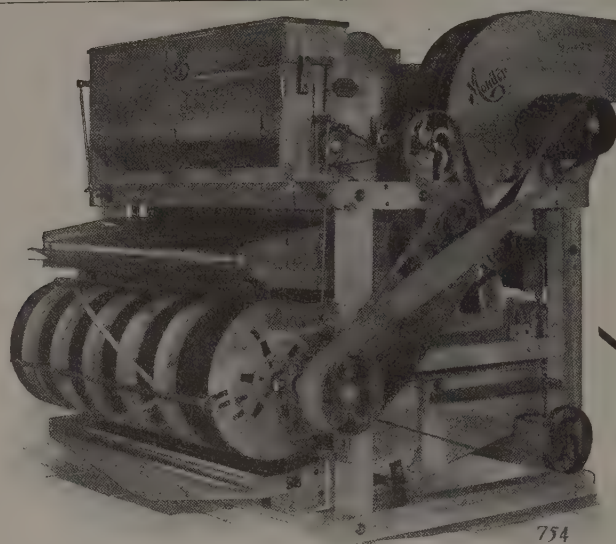
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**Northwestern Separator  
for Separating Wheat and Oats**

One of the large grain companies of Minnesota has just placed two more of the machines—No. 972—the largest size—they already having operated and tested the machine in their plant.

Certainly if they had not found the Monitor capable of producing superior results they would not put in more of them.

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Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

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Established in 1882.

VOL. XXXIX.

CHICAGO, ILLINOIS, JANUARY 15, 1921

NO. 7

## An Innovation in Grain Storage Construction

The Valier & Spies Milling Company of St. Louis Effects Many Economies in the Plans of Its New Storage Elevator

THE fall of 1919 was an anxious time for millers. There was no lack of orders, but deliveries were uncertain and the supply of wheat was spasmodic. It was a season when many mills had to shut down over considerable periods because the railroads could not deliver grain to the mills, grain which was bought long since and held by impatient shippers against the time the railroads could find opportunity to send a stray car their way.

To meet this emergency the Valier & Spies Milling Company of St. Louis planned a new elevator of 750,000 bushels capacity. The difficulties in store were foreseen early in the year and a contract was let with James Stewart & Co., of Chicago. The building was finished and turned over to the milling company on December 12, 1919. They had ample storage then to take advantage of any temporary flux of grain that came to St. Louis and their future was assured, as far as supplies were concerned.

The problem of mill storage, however, comprises something more than merely affording a place to store wheat, and none knew it better than Messrs. Valier and Spies. While the flour mills have been exceedingly prosperous during Government regulation, they knew that under ordinary conditions the competition between mills is so close that no economy can be overlooked. An elevator built on war prices would be well enough when operated under war conditions, but war price overhead in a peace-basis operation would be a serious handicap for any mill to overcome successfully. This was the problem that was put up to the Stewart organization, but Mr. Sinks, the general manager, and Mr. Budd, the chief engineer, have a way of meeting problems, and this one was not too great for their ingenuity. They put into effect an innovation in grain bin construction, which saved hundreds of dollars for the firm, and which is so simple and, at the same time, effective that it has become standardized with the firm for all future grain storage plans.

Instead of making a concrete hopped bottom to the bins with a solid fill from the apex of the hopper to the side wall and a separate gallery beneath for the conveyor belts and other mechanism, the new construction provides for a single wall carried to the level of the conveying gallery. Pilasters are carried up from the foundation slab to the proper height inside the bin walls, and on

top of these pilasters rests a steel cone, reinforced, and with the correct pitch. This cone serves as the hopped bottom of the bin, and it has the full strength of concrete, but is much cheaper to build and has other obvious advantages. In addition the entire ground floor of the storage bins is open, well ventilated and of easy access. The ground plan of the house, shown on the following page, makes this type of construction clear.

15 Monitor Warehouse Separator; two 2,000-bushel Fairbanks Hopper Scales; and a Nordyke & Marmion Manlift, running to the top of the building. The elevators are driven by two Stewart-Falk herringbone helicoid head drives with clutch and back stop. These are said to save 15 per cent of the power and as it requires a 75-horsepower motor on each drive the total saving is considerable through this installation.

In the gallery over the storage tanks are two conveyor belts 30 inches in diameter, furnished by the Gutta Percha & Rubber Manufacturing Company of Chicago. Below the storage tanks are three similar conveyors with direct connection through to the mill or to the boat of the shipping leg. This leg has a 100 per cent mix, that is, it can receive grain from every bin in the house if desired. Each outside row of circular tanks discharges to one conveyor under each row, while the central row of circular tanks and the interstice bins discharge to the central conveyor, the interstice bins each having a short cross conveyor of its own. Incidentally the hopper construction of these interstice bins is the same as for the tanks except that the bins have a square instead of a cone-shaped hopper.

Each of the belt conveyors has an automatic take-up arranged with a countershaft and counter-balance on the wall. This insures a constant and correct tension on the belts at all times, which is another economy for the milling company. The wear and tear on conveyor belts due to stretching and running with too much slack is not sufficiently appreciated. Change of temperature alone will cause these troubles, and every elevator, no matter where situated, is subject to conditions which put conveyor belting out of proper tension. While most

conveyors have a tension adjuster, it is not automatic in most cases and as a consequence is frequently neglected. The life of the belt is materially shortened by this neglect, and in cold weather, when the belt runs too tight, there is a considerable loss in power with the ever-present danger of heated bearings.

The entire elevator is completely equipped with a dust collecting system furnished by the Cyclone Blow Pipe Company. Practically all of the grain handled is used in the mill, so that cleanliness and safety from dust explosion are given more consideration than in a commercial storage or transfer



NEW ELEVATOR OF THE VALIER & SPIES MILLING COMPANY, ST. LOUIS, MO.

The elevator consists of a head house, 30 feet 2 inches by 40 feet 3 inches on the ground plan and 181 feet 7 inches from the rail to top; 18 circular storage tanks, 20 feet in diameter and 109 feet 3 inches high; and 10 interstice bins. The basement of the headhouse below the rail level is 17 feet 6 inches, and the gallery above the tanks is 11 feet 6 inches high.

The headhouse is equipped with one receiving and one shipping leg, each of 12,000 bushels capacity. The receiving leg is fed by receiving conveyors from a 2,000-bushels receiving pit on each of the two receiving tracks. There is a No.



house where the loss due to dust collection could easily eat up profits.

Power is entirely electric. There are 13 motors ranging from 75 to 5 horsepower, all of which, with the exception of the head drives, are equipped with the well known Morse Silent Chain Drives for power transmission.

With this ample storage the mill is well able to take care of its wheat purchases regardless of the inactivity of the flour market, and can provide for all possible future needs under the most active business conditions. This added storage was needed at St. Louis, for compared with the amount of grain which is handled there every year the storage is far from excessive, in fact the market has often been congested with grain, which condition this new elevator will help alleviate.

In spite of the fact that the house was built at the peak of material and labor cost, the methods of handling material, the employment of labor-saving devices, and the management and oversight of building have been so improved that the capacity unit cost of the house is little if any greater than for elevators of the same size and general construction built 10 years or more ago. The new house, therefore, has nothing to fear from older structures erected under less difficult conditions, and, indeed needs only time to prove the value of

concentrated purchases, the United States should seriously consider the desirability of meeting them through a selling organization.

In the matter of the recent decline in the price of wheat the Commission gives seven specific causes; as follows:

The outlook for an increased world supply.

Concentrated buying by foreign governments last spring and slack purchases later.

"Unprecedented" importations from Canada, following "an unprecedented yield and a discount in rate of exchange."

The record breaking yield of corn in this country.

The slackening of demand for flour.

The general tendency towards commodity declines.

The change in credit conditions "with resulting disposition of distributors to refrain from accumulating usual stocks."

As to speculation and the part it plays in the making of prices, the Commission is somewhat non-committal. "While the Commission believes that speculation in wheat futures is not an indispensable part of the marketing process, and may sometimes be highly injurious, the Commission is not, in this report passing upon the whole subject of future trading." While the Commission admits that future contracts may have a legitimate use for "hedging," it says that a large volume of future trading "is

notes 12 months which would be sufficient for carryovers where necessary.

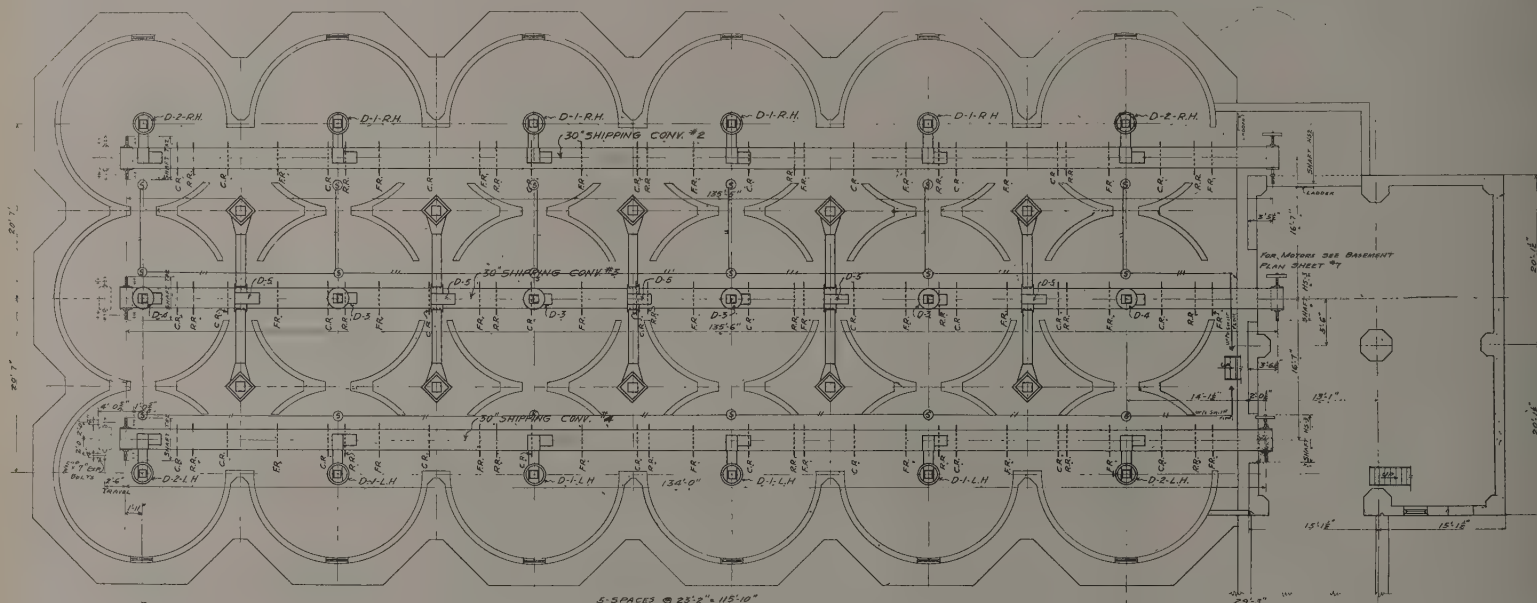
It might be well to have Market Board to buy only on inspectors' certificate and carry United States insurance.

The Board will control the grain movement of the world. The Grain Corporation almost did this and had no agents and a little producer could not get proper attention; under this plan any bank will be an agent.

Producers should have option of having their commodity turned over to the Market Board in the event of their failure to pay installment note. In such cases Market Board to be trustee and settle with lender and borrower.

## TEXAS DEALERS' OBJECT TO MINIMUM

In a petition recently filed with the Interstate Commerce Commission, the Texas Grain Dealers Association and other commercial and industrial organizations of this state, declare that the special permission issued by that national body, prescribing rules governing minimum weights on grain products in mixed carload shipments constitutes an unjust discrimination against Texas grain dealers. The petition asks that the special per-





re-shipped by rail to the retail dealer in the non-grain producing section of the state which consists of several thousand square miles."

### THE ANGOUMOIS MOTH

The Angoumois Grain Moth, which is second to the black weevil in its capacity to damage grain, is the subject of a recent contribution by E. A. Back of the Bureau of Entomology, to the publications of the U. S. Department of Agriculture. While primarily a pest of wheat and corn, it attacks all cereal grains. It is found chiefly in the



FIG. 1. WHEAT KERNELS DESTROYED BY MOTH

Southern and Central Atlantic States and rarely does harm in the North except to grain in storage.

It is the farmer who suffers most, as he often loses an entire crop of wheat or corn by its depredations. Millers frequently refuse to buy wheat which has been attacked by this moth. When wheat is attacked by this moth it loses about 52 per cent of its weight. Corn, being larger, loses from 12 to 24 per cent of its weight when kernels are attacked by a single insect only. But the kernel of corn is large enough to maintain three or four moths in development. A single insect will completely ruin so small a grain as milo or sorghum.

Corn in the crib is particularly subject to infestation. The young larva usually enters the kernel at the germ end of the seed, bores in through the seed coat which is there more tender, and thus finds itself in the softest part of the kernel. The germ is eaten first, then the harder portion of the seed, and usually the emergence hole is found on the outer portion of the kernel. If infested grain is



FIG. 2. THE WORK OF THE MOTH IN CORN

heated to 120 degrees Fahrenheit, all insects in it will be killed. Heating to 120 degrees will not injure the germinating power.

The life history of a moth is as follows: The female lays an egg on a kernel of wheat from which the larva hatches and gnaws into the kernel by a hole no larger than a pin prick. Inside the kernel the larva feeds on the endosperm until it is full grown, at which stage it is as long as the kernel. This of course depletes the weight of the kernel. Then the larva is transformed into the "pupa" and finally leaves the kernel by a round hole, as a full-fledged moth. This hole is called

the "emergence hole," and wheat kernels which have it are only about 50 per cent of normal weight, since the endosperm has fed the larva. Fig. 1 shows a number of kernels of wheat that have this emergence hole. There is always in such grains a second and much smaller hole through which the larva penetrated into the kernel.

The Angoumois Grain Moth varies in color from buff to grayish or yellowish brown. When full grown, the average wing spread of the moth is half an inch. When moths of this size, closely resembling ordinary clothes moths, are seen flying about grain, it is reasonably certain that there is infestation by the Angoumois Grain Moth.

This is one of the oldest grain pests in this country. It gets its name from the old province of Angoumois in France. It has been domiciled in this country since 1728, when it was located in North Carolina. One of its popular names is "fly weevil." It has never become a pest very far north since it is killed off by cold winters.

### SOMETHING NEW IN VIRGINIA

Virginia was about the first state in the Union to have an established grain business, so that it seems rather incongruous to speak of the new Young-Sweetser Company Elevator at Fredericksburg as an innovation. But such it is, for the house is the first receiving elevator in that territory and the

form Scales and two automatic scales in the house. An Invincible Cleaner of 750 bushels' capacity makes the grain ready for economical shipment, and a Western Corn Sheller takes care of the cob corn, of which a comparatively large amount is delivered to the elevator.

Electricity from a central station is used for power. There are three motors of 5, 7½ and 10 horsepower respectively. The motors are connected by belt and are controlled from one board with individual cut outs.

Northern Virginia has many splendid farms and is a growing stock country, so that the prospects for the elevator are of the brightest and another crop year will undoubtedly see most of the local grain finding its way to the house.

### HOLDING COMPANY FOR STATE ELEVATORS

Two schemes are under way for financing and marketing farmers' grain. The Ohio Farm Bureau Federation is seeking the co-operation of the State Grange in the formation of a \$1,000,000 holding company to unify the state system of co-operative grain elevators. The Grange, under its charter, cannot hold stock in the new company, but its endorsement would do much to give it strength in disposing of the stock.

While the initial capital of the holding company is



PLANT OF THE YOUNG-SWEETSER COMPANY, FREDERICKSBURG, VA.

farmers hardly know what to make of it. They are not as progressive south of the Chesapeake as they are in the Middle West.

Although the elevator is new, the company has been established for years. Edgar M. Young started the business about 20 years ago, and 10 years later Houston K. Sweetser joined him in the enterprise. The business in the past has been largely handling western grain and hay for eastern consumption, and very often they would ship in 500 cars during a year. Most of this was hay, for grain is difficult to handle economically without proper equipment. But now the firm has an elevator which is modern in every respect, and besides handling an increased amount of grain shipped in, they will be in a position to take care of local grown corn, wheat and oats in a manner that will prove of the utmost benefit to the countryside, when the growers get accustomed to the plant. The house was opened about the first of September and has already handled over 15,000 bushels of local grain with no preliminary educational work.

The new elevator is served by the Richmond, Fredericksburg & Potomac, the Atlantic Coast Line and the Seaboard Air Line Railroads. The town is on the Rappahannock River, with regular boat service to Maryland, Delaware and Virginia points, and the company ships a large amount of stuff by boat.

The house is of reinforced concrete construction, designed and erected by the Spencer Construction Company of Baltimore. The receiving capacity of the house is 750 bushels per hour and 1,000 bushels can be shipped out. There are two Fairbanks Plat-

fixed at \$1,000,000, the leaders in the movement expect material enlargement as the operations of the company grow. All grain and livestock co-operative associations would be united in one marketing agency according to the preliminary plan.

In the Pacific Northwest the farmers have floated a bond issue secured by wheat holdings. Whether the money is to be used for speculative purposes, holding the wheat for higher prices, is not stated in the announcement.

In a recent address before the Chicago Council of the Association of American Advertising Agents, J. F. Langner, a directing head of the co-operative organizations of the Northwest, said:

Then we have worked out a plan of financing so that our associations can advantageously merchandise their products, instead of dumping them on the market. Whenever we have a problem of this kind we take it to the great bankers of the Pacific Coast, sometimes even to Chicago or New York bankers.

Sometimes the associations require millions of dollars in loans. In 1918, the California Prune and Apricot Association borrowed \$10,000,000 in one loan at 4½ to 4%. Our Pacific Northwest wheat growers' associations are issuing acceptances to the extent of millions of dollars which are available for re-discount through the Federal Reserve Bank. They are even issuing short time commercial paper secured upon wheat in storage at the rate of \$1 a bushel—and wheat at this figure is as good as gold; and this paper is being snapped up by buyers as soon as it is issued. In fact our associations are receiving from bankers the same treatment as Armour or the Standard Oil Company because they have discovered that by proper organization and management they can command the same credit facilities as do any other properly organized and properly managed industry.



## Keep Your Eye on the Argentine

### Our Chief Rival in the Export Grain Trade—Something of Its Strength and Its Weaknesses

By EARLE WILLIAM GAGE

THE Argentine Republic of today is an agricultural empire. The farmers own the country, create its Government, and make its laws. Argentine has little manufacturing. The great wealth of the land comes from the virgin fertile loam of its plains and hillsides. Cattle, alfalfa and sheep are the ranking products, while corn, wheat and flaxseed loom large on the

stock reach market in as prime condition as packers desire, yet have been alfalfa fed. This is the reason why Argentine is destined to be the world's meat supply base.

Today Argentine is recognized among the stalwart nations of the Western Hemisphere. Even more, she is recognized to be one of the richest of the world's granaries, upon which large sections

imported to this country, under conditions that are decidedly unusual, however.

It is now reported that it costs only \$5 a ton to ship grain from Argentina to Europe. This is around 14 cents a bushel, and is not quite twice the pre-war level. Ocean freights are now about one-third what they were a year ago. As long as ocean freights are this low, Argentine corn and wheat can compete much more effectively with American corn and wheat at the Atlantic seaboard markets than when freight rates were high.

The country is related in climate in its southern part to us in the North, her total area being about two-fifths that of the United States. She has 250,000,000 acres available for agricultural purposes, of which 120,000,000 may be classed as in the cereal zone, less than 70,000,000 acres of which are at present under a state of cultivation.

It was not until about 1895 that wheat growing became of importance in the province of Santa Fe, which then produced half the country's crop. Since then, the wheat kings have steadily pushed back the cattle ranches, until now the western province of Cordoba and the southern province of



SACKED WHEAT PILED AT A COUNTRY STATION IN THE ARGENTINE

horizon. The strength of the agricultural element was proved recently by the drastic increase in the export taxes on wheat and wheat products which was passed by the legislature.

These export taxes are having a considerable bearing on the export demand which has come to this country during the past months. The law is so uncertain in its terms that foreign countries will not take a chance on purchases, and have bought in this country at a price considerably above the probable Argentine market. As it stands

of Europe depend for the cereals that are the staff of life.

Grain growers and salesmen watch her crop reports closely. Reports of the condition of her crops, as they are being harvested six months of the year, are telegraphed to Liverpool, Chicago, New York and all chief markets of the world, and have a marked effect on the trade in grain, for all watch closely this new agricultural giant.

The outlook in Argentine, where beneficial rains have recently fallen, shows indications of a very favorable harvest. Latest official returns of the area of wheat show no change from that published in recent reports which placed the area sown during the season 1920-21 at 16,062,000 acres, compared with 14,957,000 last season. While no official reports of production have been received up to date, some unofficial estimates continue to place the amount of wheat to be produced during the present season as high as 244,000,000 bushels.

Argentine is today our heaviest competitor for



HOW CORN IS STORED IN THE COUNTRY

Buenos Aires, are included in the grain fields. The territory of La Pampa Central, where agricultural expansion has been slower, is now on a more steady footing with a most promising future, and it is thought this will occupy first place in wheat producing in the near future.

Argentine's corn belt presses along the shores of the Parana River in the lower section of Santa Fe, and the northern section of Buenos Aires. The great cereal producing belt is known as the Pampas, being one vast, treeless, fertile plain with slight



A NEW COUNTRY ELEVATOR IN THE ARGENTINE

at present England has called upon the Argentine Government to make a definite statement as to export duties to be levied on wheat. If the Argentine Government protects British buyers and makes it possible for them to get their supplies there, it is very likely that the Britishers will resell the high-priced wheat they have bought from us.

Argentine possesses the world's largest alfalfa-growing area. And this is not a new crop, for old cattlemen boast of seedings 30 years old that produce succulent grass forage today. Of course this is exceptional, but the ideal soil and climate causes the plants to last longer than in any other agricultural section on the globe. Alfalfa is not grown for the crop but for cattle. Very little is marketed, though Buenos Aires hay markets offer \$20 a ton, and Montevideo even more. Mild winters permit year around grazing.

Thus beef making here is an almost exclusively grazing business, though the former open ranges have been given over to small pastures. Though vast quantities of corn, wheat, rye and barley are raised, very little is fed. The majority of the

the great grain trade in Europe. Italy, France and England have been her heaviest buyers, though Germany under normal conditions took a large share of her surplus. We have bought corn of her, though our farmers produce 70 per cent of the world's corn crop, and recently wheat has been

slope toward the sea. The cereal zone proper includes an area of approximately 160,000,000 acres, taking in Buenos Aires, Santa Fe, Cordoba, Entre Rios, and La Pampa Central States. The whole area of these is more than 200,000,000 acres, and aside from producing more than 500,000,000 bushels



SACKED GRAIN IN THE FIELDS AWAITING TRANSPORT



of grain, 12,000,000 acres are devoted to the alfalfa crop, more than 120,000,000 head of cattle and sheep are grazed. Placed in corresponding latitude over the United States, this area would cover a block 425 miles wide and extend from the 28 to 41st parallel.

The soil of this vast agricultural empire resembles very much that of Illinois, both in productiveness and appearance, being exceptionally fertile. The climate for the whole area is very mild, the temperature seldom rising above 95 de-

ing grounds in the warmer sections of the north. Vast quantities of eggs are deposited in the soil, and as soon as the young larvae are hatched they start their destruction. The Department of Agriculture maintains a large organization for the express purpose of warring against these pests, and as a result thousands of acres of crops are saved annually.

The corn crop matures between 135 and 160 days, harvesting starting early in our spring, being at its height in April and May. Ears are shucked from

of the Argentine winter season. The harvest season for early varieties opens just before Christmas, and continues until spring.

In grain harvesting the modern American implement plays an important part. Harvesting is accompanied by means of headers, binders, and the Australian combined harvester and thresher. This latter is also known as a "stripper harvester" due to the fact that the heads are stripped from the stalks without cutting the plants. The machine is equipped with a comb with fingers which are set far enough apart to permit the plants to be drawn through until the heads are reached, when they are stripped from the plant by beaters revolving within a drum situated above the rear of the comb. Passing through this machine, the wheat is separated from the heads, cleaned, and deposited at the sacker or storage box at the side.

The middle of January, when wheat is being transported and lightered from the interior to the seaboard ports of Buenos Aires and Bahia Blanca, is also the time of the flaxseed (linseed) crop. Wheat, linseed and oats are sown in June, July and August. There are two crops of wheat corresponding to our Spring and Winter varieties, and three of alfalfa.

Flaxseed production has made wonderful progress in recent years. Production approximates 2,000,000 tons, the exports of raw flaxseed being about half. Maize, which is cultivated over an area of well toward 9,000,000 acres, is raised chiefly north of 36 degrees south latitude, although its production ranges through a broad belt of from 1200 to 1400 miles, with a tendency to push the center toward the warmer northern regions. Nearly half the corn is grown in the provinces of Buenos Aires, 33 per cent in Santa Fe, and the remainder in other regions. Yields of from 60 to 100 bushels per acre have been recorded, though average production is a little less than with American farmers.

As an exporter, Argentina is far ahead of the United States, its nearest competitor, in foreign corn trade. The former furnishes more than 45



VESSELS LOADED BY "CANALETAS" CHUTES

grees in summer and rarely below 32 degrees in winter, snow being practically unknown, an ideal land for grain production and cattle grazing.

Argentina is more like the United States than any other farm country, advises Laurel Duval, who visited the country in behalf of the United States Department of Agriculture. Though Mr. Duval reports that the country has almost unlimited resources of production for the future, he also tells us that she cannot hope to rule supreme in the world's surplus grain trade until she has a proper grain standardization rule, and has constructed ample storage facilities to handle her crops.

The world today offers no better field for the application of modern implements and machines to the operation of agriculture than the territory in the great republic of Argentina within a radius of 500 miles of the metropolis, Buenos Aires, north, west, and southwest. Made-in-United States implements lead all others. The real supremacy in this regard may be appreciated by latest figures compiled by the Argentine Government. The annual import of plows averages \$2,000,000, of which three-fourths is credited to our manufacturers. Nearly all harvesting machines, all mowers, harrows, drills and planters are from North American factories, and half of the threshing machine business.

Though Argentina has well-organized bureaus within its Department of Agriculture for education of the farmer, experiment stations and regional schools and traveling lecturers and agents, much as we have, it has been the Yankee farm implements agent who has taken the real new-vision farm spirit to her farmers. Finding a land possessed of every requisite for bumper production, he employed characteristic enthusiasm in making his sales, and as a part of this, aided the farmers in using them and in properly preparing their land for the crops.

The corn planting season opens when the United States farmer thinks about harvesting his crop, or about September 15, though in the northern part of the cereal belt, as early as the middle of August. This season continues until just before Christmas, and the exceptionally long season is most advantageous.

The locust pest is among the worst that Argentine farmers must combat. These insects invade the northern part of the cereal zone in the spring, flying in immense swarms from their winter breed-

standing stalks and thrown into baskets. After being sacked the crop is stored in the *troje*, or crib, which is built by placing poles in the ground in the form of a circle, wires then being strung about on the inside of the poles to hold the corn or cane stalks of which the wall is constructed, as the filling progresses. The *troje* is covered either with



THE FAMOUS WATERFRONT LINE AT BUENOS AIRES

canvas or zinc sheeting, though cornstalks and husks are often used.

Flint varieties predominate, some important varieties having been imported from the United States. The most common varieties of Yellow corn are Canario, Hungaro, Cuarenton, which are exported. Several varieties of White corn are successfully grown.

The wheat crop is seeded any time from the middle of May to September 15, the greatest portion being sown during July and August, or the middle

per cent of the world's exports, amounting to about 230,000,000 bushels; the United States 20 per cent.

Of course, the immense trade in linseed gives Argentina a premier rank in the foreign field. Its area is about the same as that of wheat, adding the large province of Entre Rios lying between the Rivers Parana and Uruguay. Argentina exports more linseed than any other country in the world, and she exports the major part of the \$50,000,000 crop in the form of oil.

Argentina is better supplied with cheap farm



labor than any other country on the map at present. Those who work in the grain fields are largely transients from Russia, Spain, Italy and southern Europe, who find plenty of work at good wages for five or six months, usually from November to March, while crops are being harvested. Though crops are quickly garnered, little land is really occupied by owners. The bulk of the labor is done by transients who return to Europe with the money, while the commercial profits of bumper crops are realized chiefly by extensive land owners. The last agricultural census shows that throughout Argentine there are 180,000 holdings, of which nearly 61 per cent are farmed by owners, who are generally non-residents; 31 per cent by tenants, and the remainder by lessees who obtain the use of the land by guaranteeing from 15 to 20 per cent of the crops.

### CANADIAN CROP FIGURES

The final figures have been given out as to the Canadian crop of 1920 by the Dominion Bureau of Statistics. It appears from this official statement that the wheat crop this year was 293,361,000 bushels against 193,260,400 produced in 1919. The acreage was 18,232,000 as compared with 19,125,968 in 1919. The average yield per acre was 16 bushels against 10 bushels last year.

The yield of other bread grains was as follows: Oats, 543,058,000 bushels (the largest Canadian crop on record); barley, 65,559,000 bushels; rye, 12,190,000 bushels; buckwheat, 9,966,500 bushels; corn, 13,696,000 bushels. Canada produced about 60 per cent as much buckwheat as the United States.

### SACKED AND BULK HANDLING

The problem of grain handling in the Pacific Northwest is still greatly complicated by the large preponderance of sacked grain which comes to the

weeks ago and the present consignment of grain is the first that has passed through it. The machinery, all of which is electrically operated, is running with surprising smoothness and the corps of employees is operating it with little trouble.

"With practically all of the 1920 crop to be marketed and with a big demand for storage facilities, prospects are that the elevator will be utilized to full capacity during the winter.

"With the large amount of machinery installed in the new elevator, and the fact that the large amount of grain handled during the first working days, with all the working gearing in perfect alignment, is a cause for rejoicing among the officials of the Dock Commission.

"Handling of bulk shipments offshore is a matter which has not been thoroughly threshed out by the Dock Commission, and to date no vessels have been posted as for loading. The grain being handled at the present time is for sacking and cleaning, and the craft under charter for loading at the terminal will all take sacked wheat.

"During this month (December) the percentage of bulk wheat coming to the elevator will be in excess of that of sacked wheat, as facilities for handling and sacking greatly reduce the cost of handling.

"Grain shipments from Portland for the fourth month of the cereal year continue to mount to record breaking figures. The British steamship *Heilbronn* cleared from Astoria the other day. The vessel had on board a total cargo of 371,628 bushels of wheat.

"Wheat loaded at Portland was 294,986 bushels. At the terminal at Astoria 76,642 bushels were laden. Kerr, Gifford & Co. supplied the cargo and the vessel will proceed to Norfolk, Va., for orders. It is probable that she will discharge in the United Kingdom.

"The next big carriers to finish for the continent will be the British steamer *Isis*. She is by far the largest grain carrier to load in Portland harbor.

appears and is gone in a week or so, that makes it possible to time the seeding of the wheat after the fall brood has gone and thus arrest infestation of the new wheat plants.

### THE GRAIN TRADE MOURNS

Lee G. Metcalf is dead. This announcement which flashed over the entire country on January 3 from Illiopolis, Ill., where for many years he had made his home, brought a sense of personal loss and pro-



THE LATE LEE G. METCALF

found sorrow to thousands of grain dealers and other friends. No dealer was more deeply loved for his high personal character than he; no one was more respected for his ability, integrity and devotion to the trade.

Mr. Metcalf was 59 years old when the attack of heart disease brought an end to his career after several weeks of illness. He had spent practically his entire life in the country grain trade, although he served several terms in the state legislature. No greater tribute could be paid than the trust and devotion which was accorded him by the many farmers with whom he had dealt for years and by the neighbors who were in daily contact with him for so long. In his community he was a leader in thought and deed and his influence for good cannot be measured.

In the state and the nation his great qualities were recognized and respected no less than at home. After serving three times as president of the Illinois Grain Dealers Association, he was called by the National Association and served at its head for two terms. He was unsparing of his strength in his devotion to these official duties, and under his leadership the National Grain Dealers Association received an impetus which is still carrying it forward to its deserved place among the great trade organizations of the country.

In his death the trade has received a blow, but even in our deep sorrow we are comforted by the thought that his deep religious sincerity and faith have made his place secure close to that Great Architect of the Universe in Whom he placed his trust.

May this thought comfort Mrs. Metcalf and his son and daughter in their dark hours, and they can rest assured that the deep sympathy of every member of the trade is theirs.

### NEW WHEAT FOR THE NORTH

As the wheat area pushes towards the Arctic Circle, it becomes more and more desirable to produce varieties suitable for the new environment. As a result of experiments that have been carried on by the field husbandry department of the Manitoba Agricultural College, Prof. T. H. Harrison, who is in charge of the department says a new wheat has



SACKING DEPARTMENT OF THE MUNICIPAL ELEVATOR, PORTLAND, ORE.

terminals. Although many new elevators have been built in that territory in recent years, sacking is still the common practice. This is illustrated by a recent report on the operation of the new Municipal Elevator at Portland, Ore.

"During the first 10 days of its operation 224,000 bushels of wheat have arrived at the Municipal Terminal No. 4, part of which is for cleaning before being exported and part of which is being placed in bulk storage tanks of the 1,000,000-bushel grain elevator. It required 71 freight cars to transport this wheat from the grain fields of the Inland Empire to the terminal.

"Sixty-one cars contained sacked wheat. This was rapidly passed through the cleaning apparatus of the elevator and resacked. Part of this wheat will be shipped within a few days to Europe and the rest will be held on the piers for future shipment. The remaining 10 cars contained bulk wheat. This was also cleaned and stored in the elevator tanks.

"The bulk grain elevator was finished but a few

She measures 5,564 net tons. The *Heilbronn* is 4,986 tons and the *Memphis*, which recently cleared with a flour cargo, 4,344 tons. These loadings indicate the possibilities of the export grain business in the West."

### COLD AND THE HESSIAN FLY

It is a mistake to imagine that the reason for late sowing of wheat in the fall is the efficacy of cold or frost in ending the life cycle of the Hessian fly. The immunity of late sown wheat from attacks of the fly is not due to frost, but to the fact that by the time severe frosts occur most of the flies have disappeared. Eggs have been observed hatching during the day in fields when there were frosts nearly every night. Last winter most of the Hessian fly "flaxseeds" survived the cold of winter. Experiments have shown that the eggs exposed all night to a temperature of 9 degrees above zero will hatch perfectly healthy maggots. It is the fact that the larger part of the fall brood of the Hessian fly



been produced which it is expected will find a place in the North. From what is said of it, the new wheat seems to promise well. Apparently no name has as yet been provided for it. How would "Peary" do, if it is a success and "Cook," if it is a failure?

## CORN INDUSTRY IN CALIFORNIA

California is making rapid strides toward resuming its former position as a cereal producer, and the corn growing industry, which is forcing its way into prominence by leaps and bounds, is contributing its share of assistance in bringing the goal nearer and nearer.

While the state produces a very small portion of the country's output, it is encouraging to note that farmers are taking unprecedented interest in this line of agricultural endeavor with a view to supplying as much as possible the needs of home consumption.

Prior to 1917, there was practically no material California acreage devoted to corn. In the course of that year a campaign boosting the growing of this commodity was launched and results show that already the state has been saved thousands of dollars. Growth of the corn industry means keeping in California money that would ordinarily

## New Facilities to Meet Expanding Trade

### Prairie State Milling Company of Chicago Builds Large New Unit to Insure Service to Buyers of Prepared Feed

THE prepared feed business is in a bad slump. Many feed plants have closed down for various periods and there is too little enquiry to make any of the manufacturers happy. Unprecedented crops of feed grains, low prices, and an open winter have made a combination that has been hard on the industry. But in spite of those handicaps the fine new plant of the Prairie State Milling Company at Chicago, Ill., has been running every day, the entire organization has been kept intact and there is business ahead.

The company was organized some six years ago but worked on a limited scale for four years. Two years ago the business was given a decided impetus by the injection of new blood in the concern and since then it has been booming. The present destinies of the company are under the careful guidance of H. J. Good, vice-president and general manager; and F. J. Lodeski, secretary and treasurer.

The elevator and mill building shown to the right of the illustration are the original units of the

products which are delivered by the belt conveyors to any of the six loading shoots or to storage, as may be required.

The loading facilities are interesting. The Belt Line Railroad which serves the plant is elevated to the level of the second floor. From the six loading doors shoots are lowered direct to the cars, these shoots being fed by the conveyor, so that a minimum of handling is required. A spur track from the Belt Line runs behind the elevator, from which grain is unloaded by a Clark Power Shovel through a shoot to the receiving pit. From the pit it is elevated to the scale floor and then cleaned over two Invincible Grain Cleaners and distributed to storage or to the feeder bins as required. Across from the spur track is a storage shed with a capacity of 100 cars of alfalfa meal.

A great variety of grains are used in the feeds, and they are ground on two Nordyke & Marmon Corn Crackers and an attrition mill. In both the chicken and the horse feed units Draver feeders measure the materials sent to the mixing convey-



PLANT OF THE PRAIRIE STATE MILLING COMPANY, CHICAGO, ILL.

go out to the Middle West farmer and the transportation companies.

Investigations in 1917 revealed that conditions in that state were very adaptable to corn growing, and the late E. J. Luke, Stockton manager of the Sperry Flour Company at that time, conceived the idea of a "Corn Day" demonstration to stimulate agriculturists to start the ball rolling. An invitation was extended state wide to interested farmers to meet at Stockton to discuss the new industry.

The meeting was a marked success. The 1917 acreage showed a 33 1/3 per cent increase over that of the previous year, and the 1918 acreage was exactly double that of 1917. With increased experiments came improved conditions, and the California farmers began to produce 60 bushels to the acre, while the Middle West farmer had to figure his profit on less than 40 bushels per acre.

When the first "Corn Day" was held (and since then the demand has greatly increased) there were 600 tons of corn being brought in monthly to the Stockton mills alone, at a freight charge of \$11 a ton. This at a cost price of \$35 to \$45 a ton, took \$25,000 to \$35,000 each month from California.

NON-PARTISAN newspapers in North Dakota have suspended publication owing to lack of funds and inability to collect outstanding debts.

FARMERS are hoarding grain in Germany. The Government has issued an order to the provisional governments to use armed force if necessary to compel them to give up the grain.

plant. About a year ago the demands of the business made it imperative to enlarge the facilities and in spite of the high building costs the large building at the left of the illustration was begun, L. A. Stinson of Chicago being the construction engineer. At the same time concrete tanks were added to the elevator, designed by the Macdonald Engineering Company. One tank holds 1,000 tons of molasses and the other affords additional grain storage, bringing the total storage capacity of the plant up to 250,000 bushels. The original mill building is now used exclusively for dairy and chicken feed, "Prairie State Poultry Feed," "Red Crown Scratch Feed" and "Garland Chick Feed," being the principal brands under which these latter products are marketed.

The new building, which is 55x300 feet on the ground plan and three stories high, of brick and concrete construction, serves as a mill for "Emerald" and "American" Horse Feeds and for storage and shipping. The old and the new plants are connected across Lexington Street by a gallery in which is a large reversible belt conveyor which runs the entire length of the new building, the belt being between 700 and 800 feet long. There is another shorter conveyor about half as long in the new mill. The belting was installed by W. H. Salisbury & Co.

This building contains two molasses feed units with a capacity of 10 bags a minute, and has storage capacity for 70 cars of raw material and, on the second floor, storage for 40 cars of manufactured

ors. All the conveyor machinery was furnished by the Samuel Olson Company of Chicago. The feeds are weighed over automatic scales, packed, and the sacks are closed with two Union Special Sewing Machines.

The general offices of the company are on the second floor of the new building. They are light, airy and well furnished, with private offices for the officers.

The entire plant is operated by electric power, about 30 motors, ranging in power from one-half of one to 35 horsepower. The motors are all connected by belt except the attrition mill, which is direct connected in conformity with the most efficient practice.

The plant is well designed for speedy and efficient handling of raw materials and finished products. The company took on the burden of building under war prices only to increase their opportunity of giving service, and the plan of the mill and the principle of the entire organization is encompassed in that word.

A WRITER in Canada declares that 30 pounds per 1,000 bushels is lost on every transfer of a cargo of grain. From a port on the Great Lakes to Liverpool three transfers are now necessary. If the St. Lawrence deep waterway were completed a cargo of 300,000 bushels loaded at Port Arthur or Duluth, shipped direct to England, would save the shipper \$1,350 in this invisible loss alone. Would such a waterway pay?





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#### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., JANUARY 15, 1921

## A NEW DEAL IN CALIFORNIA

THE California Farm Bureau Federation has organized an elevator company among members and has leased the 1,200,000-bushel elevator at Oakland now being finished for the Western Milling Company by the Macdonald Engineering Company. It is the intention of the Bureau to organize local companies throughout the grain producing sections of the state, build country houses, and market their grain through the Oakland elevator.

California is in sad need of bulk handling facilities and the step by the Bureau is welcomed on this score. But we fear that disappointment is in store for the farmers unless they start operations on some other assumption than that the farmers will get all the spread heretofore shown between the producer and consumer. Wheat has been sold on occasion at the ports for about \$14 per ton or 42 cents a bushel more than the farmer received. The wheat has been handled in sacks, an expensive and wasteful method, and freight, cleaning, grading, and weighing have to be considered. When these items have been accounted for the terminal operator hasn't much left out of that 42 cents gross profit to take care of the occasional losses.

Bulk handling will undoubtedly save the farmers some money whether the grain is marketed cooperatively or by privately owned elevators, but beyond that point it is doubtful if the farmers can keep down the costs of handling as low as the regular dealers did, even including the dealers' profits. The professional organizers of farmers' companies,

who do not work for nothing, too often forget to mention the fact that there is an operating cost, and that that cost is generally in inverse proportion to the business experience and fitness of the operator. It is always easy to show a spread between producer and consumer prices, and to infer that the producer is being robbed to that extent. It is quite another thing to operate so that he actually gains that amount. Perhaps the farmers will put it over, we hope so; but more likely they will find that the grain dealers are not the unconscionable robbers they are reputed to be.

## GRAIN EXCHANGES UNDER FIRE

EVERY Washington correspondent seems to be convinced that the bills introduced to regulate the grain exchanges will not be passed at this session. But the grain trade is taking no chances and a strong delegation is at Washington to appear at the hearings before the House Committee on Agriculture.

The principle of future trading in grain is too well established and has been accepted by too many Congressional investigation committees and court decisions to be in danger, unless the present House has become entirely crazy, which is not the case. The bills will be defeated, but they will leave a wake of criticism which the exchanges will do well to consider and to take steps, of their own motion, to correct. The main points of attack have been: 1. The tendency of private wire house offices in small towns to encourage speculation by small, inexperienced, and ignorant investors; 2. The unreliability of out-inspection of grain destined to country points; 3. The possibilities of manipulation.

Never before in their history have the grain exchanges been subject to so well organized an attack as at present. The interest in them and the publicity they are facing places the exchanges under an obligation to clean house if it can be shown that the charges against them are just, and that present practices are inimical to the public good.

Too many people believe that the grain exchanges have devised their rules with the idea of making all they can from the public, so long as they stayed within the law. Nothing is farther from the truth. The best thought of many generations of grain dealers has been expended in making rules which would enable the public to be served best, at the least cost, and with the minimum chance of exploitation by any man or group of men. No doubt the rules are still imperfect, but it is only because better ones have not been found.

## THE CAUSE OF WHEAT PRICE DROP

IT TOOK the Federal Trade Commission some weeks of investigation to find out what any practical grain man could have told it in as many minutes. Briefly the report stated that the drop in grain values was due to natural causes and was not the result of a conspiracy in the grain trade. The causes of the decrease were the factors which always determine prices: Supply; demand; finances; transportation; mass psychology.

Supply, demand and finances are world

forces the consideration of which necessitates a study of conditions in all exporting and importing countries. Transportation is generally local in its effect, but may become world-wide, as was the case during the war. Mass psychology is more or less temporary in its operation, may be local or general, but is a potential force to be reckoned with.

In its report the Commission advised against the use of war powers in attempting to control the price, and suggested that, if foreign governments continued to pool their purchases, a Federal selling agency should be given consideration.

When we consider the mass of irrelevant and unreliable testimony that the Commission probably listened to, if we may judge from utterances of some professional agitators, the report is wonderfully sane and we give the Commission credit for a constructive bit of work.

## BACK THE CUMMINS BILL

SENATOR CUMMINS of Iowa has introduced a bill providing for agricultural experts to be stationed at the consular agencies abroad in those countries having large exports or imports of farm products, to make regular reports to the Secretary of Agriculture on the state of crops, number of farm animals, and probable requirements of those countries.

This would afford farmers and those handling farm products with authentic crop and livestock news from all the world, and the trend of prices could be forecast with that much more reliability. This information is now obtainable through the International Institute of Agriculture at Rome, but the Institute takes the reports as they come from the subscribing governments and has no agents of its own to check reports or to send special information on demand.

This first hand crop news as provided by the Cummins Bill will be of the greatest benefit to the grain trade and every dealer should inform his senators and congressman that he is behind the bill.

## SOME BROOMHALL STATISTICS

WHEAT statistics are beginning to assume the importance that they deserve. For months the market has been influenced more by lack of consuming demand and the general urge toward lower prices, regardless of conditions, than by other considerations. But now we have entered the second half of the crop year and the trade is more concerned in studying our real statistical position. Broomhall of Liverpool has just issued a survey which may be of interest.

He finds that the wheat crop of Europe, not including Russia, totals 693,600,000. Official estimates for Portugal, Greece, Austria, Czecho-Slovakia and Poland are not included in this crop survey, although they are included in the figures on normal consumption and the estimated import requirements. The consumption total for Europe is 1,356,000,000 bushels. The estimated imports for the season 1920-21 is 520,000,000. Other



countries than Europe will require 40,000,000 bushels in excess of their production, a grand total of 560,000,000.

The available surplus countries including the United States, Canada, Australia, Argentina, India, the Danubian countries and Manchuria, have from 584,000,000 to 656,000,000 bushels to export. This estimate shows a world surplus of from 24,000,000 to 94,000,000 bushels. This is the British viewpoint of the world situation and buyers will make the most of it.

### SURPLUS OF FREIGHT CARS

FOR the first time in several months the railroads of the country report a surplus of freight cars. This could only be expected with the general slackening up of business and the slow movement of grain due to low prices.

Officials for the roads are advising the use of these available cars now, instead of waiting till spring when there will be an increased demand for cars, and have adopted the slogan, "Ship now and avoid the rush." Of course this advice is aimed to stimulate the railroad business, but it would not be amiss for those to heed who have corn which they expect to move before the first of May.

For several years past corn shippers have experienced losses during the germinating season when cars have not been available. It would be an extreme optimist indeed who would predict a spring congestion on the railroads comparable to that of the past three years, but there is little doubt that business conditions are on the mend and that there will be increased demands on the roads. The situation is worth close watching, at least, for the trade is having enough trouble without inviting the complication of heating corn.

### SPECULATING IN CORN

DISCLAIMING any attempt to advise, a recent issue of *Wallaces' Farmer*, Henry A. Wallace being most prominently mentioned as the new Secretary of Agriculture, stated that in eight of the 11 years since 1870 that crops were 10 per cent above normal, it paid to hold corn till May rather than market in January. It is further shown that in eight out of the 11 years it paid to hold corn over to the next year, figuring the cost of holding at 10 per cent of the value of the corn.

Mr. Wallace produces the figures to prove his assertion, but he will have hard work convincing those farmers who are still holding parts of two and in some cases three crops of corn for better prices. "All signs fail in dry weather," says the old proverb, and also all statistics need judicious handling in periods of momentous economic change such as we are passing through. The farmers who were not satisfied with the high prices of the past two years have found out to their sorrow that good things have limitations just as bad ones have. On the other hand no doubt a great many corn growers will take the tip and speculate by holding their corn till next year. If this proves to be one of the lucky eight years, Mr. Wallace will have

made himself solid with a very considerable constituency. And he doesn't need it either, for his magazine has been for years the guiding spirit in thousands of farm homes, and to the credit of Mr. Wallace and of his father, held in revered memory, it has been a pretty good guide.

### SELLING THE WHEAT CROP

IN THE hearing on the Futures Trading Bill at Washington on January 4, Representative Tinch of Kansas asked A. E. Reynolds, chairman of the National Association Legislation Committee, if the farmer derived any benefit from the fact that the wheat crop was sold 14 times on the Chicago Board of Trade before it was harvested. Mr. Reynolds replied that he didn't know.

If it is a fact that the wheat crop is sold 14 times, and it is quite possible, it merely shows how sensitive the market is to changes in world conditions. While our wheat crop is growing, Argentine and Australia are harvesting and the crops of the entire Northern Hemisphere are developing under varying conditions. As reports are received, the future value of our wheat crop is affected in relation to the nature of these reports, and that value is reflected in price.

The 14 sales of the wheat crop also shows that when grain traders find themselves on the wrong side of the market they accept a small loss and get out, or if right, are satisfied with a moderate gain.

The fact that the crop value is indicated by these sales and purchases, is enough to make the system worth while. Without this constant barter and exchange the farmer would have no indication of what his wheat was worth when he came to market it and would be helpless. Certainly these 14 sales are of value, and if Mr. Reynolds did not choose to say so in answer to a categorical question, no doubt he made the point clear in the general course of his testimony.

### FARM RELIEF LEGISLATION

WHEN Congress assembled for the short session in December it was well loaded with farmer propaganda relative to the drastic declines in value of farm products. As a result the bills to revive the War Finance Corporation were rushed through and re-passed over the President's veto. This was done against the advice of Secretary Houston and bankers generally, but the farmers clamored for it, seeming to consider it a panacea for all their ills.

A reaction seems to have set in, however, and other farmer relief bills, dealing with the tariff, credit and cooperative marketing will certainly have more mature consideration and will be prepared more carefully if they are passed at all. There seems considerable doubt that any of them will become law during this session.

Tariff legislation is a particularly ticklish proposition right now. The high rate of dollar exchange makes it exceedingly difficult to sell abroad either our raw materials or our manufactured products. Many things

that we produce can be bought cheaper elsewhere, and even if we are willing to extend credit, the buyers look to the time of ultimate payment and naturally seek the lowest market.

Europe must pay us about \$1,000,000,000 a year in interest on loans and credit advances. They have no gold so that the payments will have to be made in merchandise. If we erect tariff walls to exclude foreign goods, the interest payments, to say nothing of the principal, will not be made. That is the situation, and it is patent, even in Congress, that we cannot play politics or resort to log-rolling in the matter. To draw the line between revenue producing and exclusion tariffs is a real statesman's job, and Congress will probably not rush into it without thorough study.

The experience of many North Dakota banks whose funds were used by patrons to speculate with, also has had a sobering influence, and the legislators are becoming educated on farm financing questions even if the farmers are not.

### THE GRAIN TRADE PRACTICES

VOLUME 1 of the report of the Federal Trade Commission on the Grain Trade has been submitted to Congress. This first section covers Country Elevators and Country Grain Marketing in a comprehensive manner. The letter accompanying the report may be found on another page, and this letter describes the full scope of the enquiry in the country grain business.

The other sections of the report will be published in separate volumes and will cover: Terminal Grain Markets and Terminal Cash Grain Business; Costs and Profits of the Present Marketing System; Future Trading Operations and Their Results. Judging from the first volume, the survey is comprehensive and impartial and makes interesting reading.

Among the interesting facts which the report discloses is that 50 per cent of country elevator operators never use hedges. No wonder there is a cry against future trading. Half the dealers know nothing about it, and attribute their losses to it on that account. This is in marked contrast to the cooperative elevators of Canada who refused to buy a bushel of grain from the farmers if the Winnipeg grain exchange should close and deny them the privileges of hedging. The Canadian country grain dealers do not believe in speculation so they insist on hedging.

### A PLAN OF WORLD FINANCING

MISSISSIPPI Valley exporters have submitted a plan for world financing which will interest the grain trade, as our foreign commerce is necessary in stabilizing the grain markets. Briefly, the plan is as follows:

A United States Government Finance Corporation will be created with sufficient capital stock to issue short term bonds at attractive rate of interest, these bonds to be secured upon the funded foreign debt and the Corporation. The indebtedness of our Allies, over \$10,000,000,000, to be funded at a low interest



rate, amortized on a basis of yearly payments over an extended period of not less than 25 years, first payment under amortization to begin five years from date of funding. This corporation will have the power, along clearly defined lines, to finance foreign trade through the extension of credit, under complete supervision of Federal Reserve Board. This would stabilize foreign exchange and make it possible for individual firms to do business abroad.

On the same morning with this plan comes the announcement that Great Britain has offered, tentatively, to cancel the \$8,000,000,000 due her from continental countries if the United States will cancel the \$4,000,000,000 due from Great Britain to the United States. That is, we lose four billion and gain the chance, which is rather slim at present, of collecting six billion.

Hitch up these two plans together and it gives a better prospect of international adjustment than has been apparent since the war ended. We cannot prosper permanently until Europe is on its feet, and these plans look like a pretty substantial crutch.

## EDITORIAL MENTION

What has become of the "Buy a Barrel of Flour" movement?

No one regrets that the books of 1920 are closed. May the New Year bring you greater happiness and prosperity.

The number of wheat pools that are being formed is a warning to dealers, no doubt, to watch their step or they will be drowned.

Business conditions at the beginning of the new year are characterized as "poor but sound." The poorer they are the more sound accompanies them.

The Wheat Growers Association is still predicting \$3 wheat to its members. They began this prediction when wheat was \$2.50 and the members are still holding the bag.

The statesman from North Dakota, Senator McCumber, proposes a duty of 50 cents a bushel on wheat. Of course it is silly, but think how fine a sound it has to the Senator's constituents.

Galveston is becoming one of the great grain ports of the world. Last year 44,726,484 bushels of wheat were shipped from there. That was over twice as much as cleared from Philadelphia.

W. H. Lyon of Sioux Falls proposes to stabilize the price of wheat by having the Federal Government contract to pay a certain price for whatever surplus grain remains on hand June 1. Thus the Government would have to fix the minimum price of wheat each year and guarantee purchase. Perhaps Mr. Lyon, who is a lawyer, likes Government

price fixing, but most of the country, and certainly the Government, is tired of it. Enough is enough.

About \$1,000,000 worth of Canadian wheat certificates have been lost, or were not turned in before the Wheat Board closed its books. Many farmers seem to have had little confidence in the Board.

The controversy is still raging as to whether corn is a cheaper fuel than coal. The only way to tell is to find out the thermal units in the available kind of coal, then compare it with corn on the cob which has 6,470 units.

The Minnesota Legislature is considering a bill in which dealing in futures is declared "a gambling contract" punishable by a fine for the first offense and a jail sentence for other offenses. If we can survive this year without some herd of asses in a legislative body spilling the beans, it will be well near a miracle.

The agitation against future trading can be analysed about as follows: 50 per cent peanut politics; 20 per cent professional farm agitators' blab; 20 per cent honest ignorance; 10 per cent misuse of essential facilities. There is another 50 per cent, which we will have to term "invisible loss." This is neglect to use the future market.

A busy organizer enrolled a large number of farmers in the wheat growers organization at \$2.50 per head. An organization meeting was finally announced and all the enrolled members appeared. The meeting was complete except for the organizer. He had skipped with the funds. This happened at Thief River Falls.

The 200,000-acre farm in Montana owned by J. P. Morgan & Co., seems to be flourishing. This year 52,000 acres were under cultivation and nearly a million bushels of wheat were threshed. It is an all-machinery farm, under the efficient management of Tom Campbell. No doubt Mr. Morgan will soon be complaining of the grain gamblers that depress the price of wheat.

"The truth of the matter is," says the *Leader*, a newspaper at St. Cloud, Minn., "that while big business (Wall Street) is a solid unit against the aspirations of the farmers and workers, it is not organized to restrain parts of itself from going too far." Wall Street apparently has an attack of locomotor ataxia, while the *Leader's* affliction appears to be an ingrown grouch.

From July 1, 1920 to January 8, 1920, the Bureau of Markets reports that we have exported 164,790,000 bushels of wheat, not including flour; 4,590,000 bushels of corn; 2,460,000 bushels of oats; 12,879,000 bushels of barley; and 22,119,000 bushels of rye. If our sales should keep up for the remaining six months of the crop year our holdover would

be completely minus. But Canada, Australia and Argentine each have a substantial surplus to help out, so there is little danger of over-drawing our supply.

Dockage in the southwestern part of Minnesota averaged 7.3 per cent last year. The freight saved if this dockage had all been cleaned from the grain before shipment would have represented a tidy profit to the elevators.

It will be no surprise to the majority of dealers that the Federal Trade Commission found that 80 per cent of the country elevators handle side line and that these in order of importance are coal, feed, flour, building material, and seed. It will also be no surprise that the side line which is most profitable at one station is at the bottom of the list at another.

The Idaho Agricultural Experiment Station at Aberdeen has a new strain of oat seed ready for distribution. It is called Idamine and out-yields Swedest Select over six bushels to the acre. Our hats are off to the experiment stations. On extremely limited appropriations they are doing more constructive work than most of the other state departments put together.

Minnesota legislators are preparing a bill whereby a farmer can have grain graded on his premises and binned there under seal of the state inspector, under the impression that such grain would be as acceptable as collateral for loans as a terminal receipt. The grain on the farm is just as good grain, but it is a long way from being liquid collateral which is the chief virtue of a terminal receipt.

Dr. E. F. Ladd of North Dakota, state inspector of grains, weights and measures, has fixed a margin of six cents for a country elevator to charge to cover cost and profit. While this is ample, no doubt, for some houses, the smaller elevators with limited business will find no profit at all. Many will do business at a loss. One can trust Dr. Ladd to get a theory and then make someone else prove it.

The trouble in North Dakota seems to be that they just like to fight. The State Auditing Board wanted to audit the accounts of the state mill and elevator at Drake. The State Industrial Commission wouldn't let them. So the Board petitioned the supreme court of the state for an order to the Commission to show cause why the audit should not be permitted. The court denied the order. So that ends that.

The Minneapolis Chamber of Commerce will appear on February 7 before the Federal Trade Commission at Washington to answer to the charge of unfair practice, the complainant being the Equity Cooperative Exchange of St. Paul. The testimony ought to be interesting reading, and it may be a disappointment to the cooperative farmers to learn that it takes a long time to build up a selling organization and that an exchange cannot be expected to function over night.



H. E. NIEMEYER  
Cincinnati

# NEWS OF THE TERMINAL MARKETS

W. M. BELL  
Milwaukee

## EXPECTS TO HAVE WAITING LIST

Early in this fall, the Boston Chamber of Commerce inaugurated a "drive" for the purpose of increasing its membership to 7,500. The success of this movement was so great, that recently it was suggested that membership in the organization should be limited to that number. As the result of a referendum which later on was held, a majority of votes were cast in favor of this proposition. At last accounts, the membership had nearly reached the limit thus fixed, and it is confidently expected that a waiting list will ere long be opened.

## EXPORTS AT BOSTON FALL OFF

Lack of European buyers is given as the principal reason for a marked falling off in the grain export business from Boston during 1920, as compared with the figures for 1919. Since January 1, there were shipped overseas from that port 3,945,709 bushels of wheat, 529,055 bushels of oats, 364,498 bushels of rye, 121,429 bushels of barley, 25,843 bushels of corn, and also 476 barrels, 389,913 sacks of flour. For 1919, the exports were 9,165,409 bushels of wheat, 4,627,982 bushels of oats, 912,134 bushels of rye, 2,717,327 bushels of barley, 2,525 barrels, 1,682,902 sacks of flour.

## CONDITIONS AT ST. LOUIS

"Receipts of wheat the past week have been fairly liberal with a general hardening tendency in the market. More outside mills are coming into the terminal market now for their supplies, and while they are not buying in any great volume, still their total buying is greater than our receipts and they are calling on our small stocks here at all times. Through our careful inquiry during the past 30 days we are inclined to think the farmers have more wheat back in their hands than they had at this time last year, or have had for three or four years—many of them are determined to hold for higher prices.

"The export demand for wheat continues active and is really making the market for wheat. Mills are operating generally at a very reduced capacity and in some cases only to keep the mill running. Quite a few of them have not made a dollar for the last five months in working their mills. The Pacific Coast wheat is being offered at Gulf and southern Atlantic ports at \$2 to \$3 a barrel less than it can be produced in this territory. If this export demand keeps up on wheat we look for a steady and probably a slow advancing market up until the next crop. Of course, it will depend a great deal on how the growing crops come out during the winter, what the new crop will start in at. The premium is 30 cents over the option on No. 2 Red wheat.

"We have had but very little movement of corn so far and the demand has been very light. It looks like any increase in receipts to amount to anything would cause lower prices. Industries are running at a very much reduced capacity and terminal houses having driers are very slow to take hold of this proposition of drying it out. It looks like the demand, though very small, will probably be able to take care of the receipts. A great deal of this corn has been put in the crib permanently and will probably not be moved until the farmers find out what kind of a crop they are going to raise. We are getting a little movement of corn now, of the surplus stocks that farmers could not take care of—the quality is rather disappointing, most of it grading five and showing considerable damage. We cannot see very much to bull corn on and doubt if we will get any further

break. It looks to us as though it will work into a very narrow traders' market for the next four or five months.

"Oats will be influenced considerable by corn, although there is an independent demand for oats at all times. We look to see somewhat higher prices on oats for the next 60 days, but do not think we will get any bull market. Oats shipped to St. Louis have been bringing from 1 to 2½ cents over outside markets."—*Elmore-Schultz Grain Company, St. Louis, Mo. Market Letter of January 12.*

## JOS. P. GRIFFIN FOR PRESIDENT

There was no contest on the Chicago Board of Trade for office of president at the January election and Jos. P. Griffin, resident western partner of J. S. Bache & Co., of Chicago, New York and branches, will head the affairs of the Board during the coming year. Mr. Griffin served the Board as president during

JOS. P. GRIFFIN  
President Chicago Board of Trade

1916-1917 when the many problems arising almost daily demanded a man of exceptional ability and sound judgment. It was felt that a strong man was needed as the president of the Board this year and it was a source of great satisfaction to members and friends of the institution that Mr. Griffin consented to serve. He has been a member of the Board for 21 years.

Theodore E. Cunningham of Harris, Winthrop & Co., defeated Adolph Kempner for the vice-presidency. Mr. Cunningham has been on the Board since 1898.

On the directorate there will be new members, Fred S. Lewis, James C. Murray, Charles H. Stone, David Howard Lipsey and Allen M. Clement. Kenneth P. Edwards was elected a director for one year to fill a vacancy.

At his inauguration Mr. Griffin appointed an Advisory Board to serve in conjunction with present officials of the Board in combating adverse sentiment and sending out educational propaganda that will enlighten the public as to the purpose and beneficent objects of grain exchanges generally.

L. F. Gates, retiring president, is chairman of the Advisory Board, the other members being C. H. Canby, Edward Andrew, J. A. Bunnell, T. E. Cunningham, B. A. Eckhart, W. N. Eckhardt, Howard

B. Jackson, E. D. McDougal, Robert McDougal, R. W. McKinnon, Jas. C. Murray, J. P. Malloy, F. B. Rice, J. J. Stream, Wm. Simons, C. H. Sullivan, G. B. Van Ness, A. J. White.

## THE PITTSBURGH MARKET

Our oats markets has had fair to liberal receipts with only a fair demand for better grades. Lower grades are badly neglected and accumulating here. Many shipments arriving here are badly mixed with bin burnt oats, and the discount on this grade are very severe. All of the Eastern markets being full of this class of oats. Our market is following Western quotations very closely at this time.

Most of the arrivals of corn here are from nearby markets and consist chiefly of dried corn.

There is a very indifferent demand for corn, with buyers only purchasing for immediate requirements.

The trade generally are more optimistic than a few weeks ago, but are not purchasing any more grain. There is considerable talk about dealers having light stocks, etc., but all of the Eastern buyers report the consuming demand considerably below normal.—*Harper Grain Company, Pittsburgh, Pa. Letter of January 12.*

## LIGHT RECEIPTS AT PEORIA

Our receipts of corn recently have not been large, and values have been holding well in line with those in other markets. The demand here has not been very active for several weeks past, due to the fact that nearly all the corn grinding industries have been closed down, and it is uncertain just when they will resume operations. With the curtailing of the local consumptive demand, most of the arrivals have to be taken for shipment, and while a few small lots are being worked from here for export, the domestic trade East has been very dull. The mild weather prevailing through that territory has decreased the feeding demand. Illinois dealers have not been free sellers of corn recently, but there has been a fair movement from Iowa and the Northwest.

"Receipts of oats continue light and prices have been holding up well. The demand has been light and we do not look for an improvement until feeders become more active buyers."—*Mueller Grain Company, Peoria, Ill. Market Letter of January 12.*

## SUPPORT NEEDED TO HOLD PRICES

"It looks now as though holders of reserves of wheat should watch and take advantage of the sharp swells in prices. It is contended by some interests here that only very serious set-backs to our growing crop will make possible the maintenance of substantial advances in values. Free sales of the large Argentina surplus, 138,000,000 bushels are restricted and seriously checked by the uncertainty of the super-tax that may be assessed. Broomhall cables from Australia say further rains and storms are damaging the crop; about half secured and immune from further damage. Bids 'to arrive' for Hard Winter for early shipment are more in keeping with spot values. Domestic Cash trade very small here.

"Arrivals of corn are still liberal, and gradually the area from which come reports of freer farmer marketing is widening. As against the price of Plate lots and their limited offerings, there should be an active trade in American Mixed Corn for export. So far, support in futures from big local interests has been unlimited; but the freer movement lately from country stations means a steady accumulation at the terminals and the market



needs now more general buying or a very substantial increase in the business with the other side."—*Pope & Eckhardt Company, Chicago, Ill. From Market Letter of January 12.*

## HOW MUCH CARRY OVER NEXT JULY?

In answering this question C. A. King & Co. of Toledo, Ohio, says in recent Special Market Report:

"Much will depend upon exports. They are generally largest the first half of the season. Europe is inclined to favor new Argentine and Australian wheat during the winter and early spring. Estimates on their combined surplus vary from 230 to 260,000,000. First half of the season we exported about 200,000,000, largest exports on record for six months. We have imported 20 to 25,000,000 from Canada. If a tariff is placed on imports, further imports are unlikely. If we should export 100,000,000 the last half of the crop year and domestic consumption continue below normal, we should have a liberal carry-over next July. If our exports should be 125,000,000 and consumption increase, carry-over would probably be small. Last season Europe imported 585,000,000. North America can furnish 500,000,000 this season and still have a liberal carry-over. Southern hemisphere can furnish the balance and have considerable left for export after July 1. World has plenty of wheat."

## THE FAMILY CASTORIDAE VISITS BOARD

A beaver is a large aquatic rodent animal of the northern part of the world, named by Linnaeus *Castor fiber* and representing the family *Castoridae*. It is distinguished by the possession of large, fully webbed hind feet which form the principal instrument for swimming and more especially by its extraordinary tail which is exceedingly broad and covered with a horny integument resembling webs. A large beaver is about two feet in length from the root of the tail to the nose, and the tail will be nearly a foot long. Such a one will weigh about 35 pounds.

The beaver has rapidly disappeared wherever civilization progressed or trapping was systematically carried on, and now no beavers are to be found in the continent of North America south of the



MR. PATTEN'S NEW BEAVER COAT

rivers that flow into Hudson Bay except in the northern parts of the Rocky Mountains and in a few remote and scattered places like the forests of Maine and the Lake Superior region where they are more or less protected by law.

Considerable excitement occurred when 11 beavers early in January, visited the exchange floor of the Chicago Board of Trade. They walked, however, on two feet instead of four, being borne by no less a personage than James A. Patten of Bartlett Frazier Company. Mr. Patten is said to be very proud of his big beaver coat as the animals from which it is made were caught on his son Jack's 2,500-acre ranch in Montana. This ranch

lies between Boulder and Butte, Mont., and is being improved into a very serviceable, modern property.

## ANNUAL ELECTION AT PEORIA

The annual election of officers on the Peoria Board of Trade at Peoria, Ill., was held January 10. George L. Bowman was chosen president, G. C. McFadden and H. G. Atwood, vice-presidents, John R. Lofgren, secretary, and W. C. White, treasurer.

Directors who will serve the coming year are: Wm. S. Miles, J. M. Van Nuys, H. H. Dewey, A. W. Harwood, Louis Mueller, L. H. Murray, F. L. Wood, W. H. Barnes, E. R. Murphy, G. A. Peterson.

Mr. Bowman, president elect, might be termed a Peoria product. He was born just 23 miles from that city and with the exception of a short time



Geo. L. Bowman  
President Peoria Board of Trade

spent in the railroad business has passed his life amidst grain affairs, when quite a young man he went to work for Rumsey, Lightner & Co. of Chicago. Then he traveled successively for Hancock & Co., the Warren Commission Company of Peoria and Fraser & Co. of Chicago.

For a short time he operated an elevator which he purchased at De Kalb, Ill., after which he entered the commission business at Peoria. The firm name is Geo. L. Bowman & Co. with offices in Room 24, Chamber of Commerce Building. Mr. Bowman has been very successful as grain receiver, and few men in central territory are better or more favorably known.

## LITTLE GRAIN HELD IN EAST

The grain trade in general has been fairly quiet in this market during the past week. Receipts have been small and demand light. The wheat business seems to be at a standstill, local mills reporting lack of buying of their commodities. Minneapolis is the cheapest market offering wheat to the East at the present time. Arrivals of corn are very light for this time of the year and while there is not an active demand, the receipts—being limited—find ready buyers. Oats are in normal demand, with little fluctuations in prices.

It is our opinion that there is very little grain of any kind held in the East, and that a more active demand is likely to soon come from there, which will undoubtedly strengthen up prices and more especially command a premium on the spot corn and oats.—*Seymour-Wood Grain Company, Buffalo, N. Y. Letter of January 12.*

## COMPARATIVE JANUARY OATS POSITION

Briefly the 1920 oats crop of 1,526 million compares with a five-year average production of around 1,430, a five-year average consumption of around 1,375, basis of around a 95 annual export oats total. Of the 1,245, 1919 crop was 93 August 1, 1919, farm oats reserves there were 56 left on farms August 1, 1920.

Assuming that the August 1, 1920, reserves were 25,000,000 against 24,500,000 in same period 1919. Very light as compared with recent years and may not exceed 25 to 35 for the full crop year. United States Market Reporter figures show that in large crop years more oats are consumed on farms and held in reserve. Five-year average August 1 farm oats reserve runs 78—largest since 1900, 113 in 1916.

The oats visible on January 8 to 32,000,000 is

nearly three times that of one year ago and compares with a five-year January average of around 26. They suggest the large crop. The visible in January, 1918, was 48 with a 1,538 crop.

The Canadian grain trade believes its large crop will be poorly consumed and reports say that some fields were not threshed in the far Northwest. At a Canadian money exchange discount and on quality Winnipeg July oats are figured worth a premium of only 9½ cents over Chicago July oats.—*E. W. Wagner & Co., Chicago. Wagner Letter of January 12.*

## GRAIN INDUSTRY AN EXAMPLE OF ECONOMIC EFFICIENCY

The functions of the varied membership in the Board of Trade of the City of Chicago and its relation with the world in trade and commerce is an international shuttle operating on a large scale between buyers and sellers, producers and consumers, to the end that efficiency, economy and commercial safety in the distribution of the cereal crops, hog products and seeds may be accomplished.

This is possible through the perfected machinery of an organization rigidly controlled by rules and regulations for the protection of the public and in the hands of men experienced in the economic handling and distribution of the staff of life and its relative commodities. This embraces not only the production of the United States of America, but of the other surplus producing countries and the necessities of those less fortunate lands producing an insufficiency for home requirements.

This is a year of readjustment, of attempting to resume a normal attitude after a war period, distinctly abnormal. It is a year of criticism and discontent. Almost without exception business of every kind has had to face new conditions and new problems, and the grain business has been and is no exception.

The downward trend of grain prices has led many to find fault with and even to condemn the existence of the Chicago Board of Trade and other grain exchanges on the assumption that trading in futures was responsible for the declines.

In sharp contrast to this view comes the recent report of the Federal Trade Commission directed by the President to investigate the causes of the decline in wheat prices.

The Commission listed seven causes for lower wheat prices, they were: The outlook for an increased world supply; concentrated buying by foreign governments last spring and slack purchases later; "unprecedented" importations from Canada following an "unprecedented yield and a discount in rate of exchange"; the record breaking yield of corn and the large yield of oats; the slackening in domestic demand for flour; the general tendency toward commodity decline; the change in credit conditions "with resulting disposition of distributors to refrain from accumulating usual stocks."

It did not include future trading as a contributing factor.

Meanwhile the Chicago Board of Trade is continuing to function. During the strenuous days of the war its doors were always open and in the equally strenuous adjustment times its doors will remain open, furnishing a free competitive market to all the world for the exchange of foodstuffs.

Its aim and mission is to provide a meeting place for the buyers and sellers of the food of the world. It does not make prices or deal in grain.

It records the changing prices at which grain is bought and sold. Through its rules governing dealing on contracts for future delivery of grain it furnishes a ready insurance available to grower, dealer and miller to protect him against loss which ownership might entail, thus benefitting both grower and consumer. Through the hedge or market insurance, the dealer, protected against the risk of ownership, can pay more to the grower, and miller likewise protected, can charge less to the consumer.

Standardized grades, accurate inspection, an inflexible code of honor, and above all, the future system of the organized grain exchanges have made the grain industry a shining example of economic efficiency, and that this is appreciated by the trade at large is best indicated by the amount of product



that has been handled at Chicago during the year 1920.—John R. Mauff, secretary Board of Trade of the City of Chicago, January 1, 1921.

### OPTIMISTIC ON FUTURE

Of course, everybody wants to know what is going to happen in 1921, and one man's guess is as good as another's. We are, however, taking an optimistic view of the future and we include the immediate future in that view. We are rapidly approaching a point where the domestic buyers of flour should wake up. A large amount of our wheat has gone for export and at the same time the question of the amount of surplus we now have is a debatable one. Statistics show there is a large amount of wheat in the Northwest, that is, statistics arrived at by deduction, but from a practical standpoint, word is coming in every day that up in the Northwest, outside of country elevator stocks, there is not a large amount of wheat to come off the farms. If this proves to be true, the supplies of wheat, especially in the Northwest, are going to fall far short of expectations.

So far as coarse grains are concerned, we can say that the country is still full of corn and oats and we believe that we will see, from now on, a steady movement of these grains, especially corn. The tendency of the farmer to hold corn is not nearly so pronounced as it is in other grains. Of course, if wheat makes a material advance, the farmer may figure corn is too cheap compared with wheat, and commence the same holding policy in that grain as he did pursue in other grains. If the cost of things the farmer uses and consumes is materially reduced, as it should be basis wholesale prices, then the farmer will not have the argument that he has heretofore had for the sustaining of high prices on grains; and as money is still scarce in the country districts, it is only reasonable to suppose that from now on we may expect a fairly good movement of coarse grains.

Relative to our local market: We have a daily demand which absorbs all offerings but at no time can the demand be called particularly keen except perhaps for milling wheat of good quality. Our better qualities of wheat command a premium over our March, of around 20 cents a bushel. The medium and lower grades, if not in demand by the millers, are taken up by elevators.

In oats we have a rather peculiar situation. Our spot and arrive oats are bought not by regular oats handlers, but by terminal elevator men who usually fill up their fireproof storage with wheat, but as the wheat is not available for storage this year, they are putting away oats with the hopes of earning a small carrying charge. The result is that, freight differences considered, our market is from 1 to 3 cents premium over Eastern markets.

In rye we have a good demand for our receipts, which are usually very small. Our premiums the last few days are running 16 to 17 cents over our May. This for No. 2 rye.

In barley we have a daily demand which is never

keen but which is just about sufficient to absorb the light offerings. Barley handlers report that they have hard work doing anything in a profitable way with any outside market.

Our corn market is about on a parity with Chicago, freight differences considered. It has continued that way for about a month, with the exception of 3 Yellow corn, which on account of its scarcity in this market, commands considerable of a premium.—Godfrey Grain Company, Minneapolis, Minn. Letter of January 12.

### TERMINAL NOTES

C. Darner has succeeded H. R. Van Moren as assistant manager of W. H. Bartz & Co., of Des Moines, Iowa.

The Halliday Elevator Company of Cairo, Ill., remembered its friends Christmas time by the gift of a hat brush.

Harris, Winthrop & Co., of Chicago, gave each of their employees a month's salary as a Christmas remembrance.

Walter E. Schmidt, state grain inspector under Governor Lowden, was recently elected treasurer of the sanitary district of Chicago.

The interest rate on advances under the rules of the Milwaukee Chamber of Commerce, for the month of January is 8 per cent per annum.

The Taylor & Patton Company of Des Moines, Iowa, announces that C. H. Casebeer is now vice-president as well as manager of that company.

Theodore Carstens, representative at Baltimore, Md., of Taylor & Bournique Company of Milwaukee, Wis., has closed the Baltimore office and returned to the home office.

Claude L. Thompson, member of the firm of Lamson Bro. & Co., of Chicago, Ill., has withdrawn from the firm and will engage in the grain commission business on his own account.

The Elmore-Schultz Grain Company of St. Louis, Mo., mailed its friends a very handsome calendar for 1921 which gives the weather forecasts for every month throughout the year.

Walter A. Starr, formerly vice-president of the U. S. Grain Corporation at San Francisco, Calif., has formed the Pacific Grain Company with office in the Merchants Exchange Building.

The firm of Kneisler Bros., retail dealers in flour and feed, at 711 Kinnickinnic Avenue, Milwaukee, Wis., has been granted membership privileges in the Milwaukee Chamber of Commerce.

Logan & Bryan have opened for the season their branch office at Coronado Beach, Calif., in charge of Charles S. Fay. It is located in Hotel Coronado and has direct connections with all leading markets.

C. L. Williams, who has been for a number of years past with Park & Pollard Company of Boston, Mass., is now associated with the Black Rock Milling Corporation of Buffalo, N. Y., as wheat buyer.

The Milwaukee Chamber of Commerce, Milwaukee, Wis., followed its annual custom by dispensing Christmas cheer to 650 poor people of the city, in the distribution of 108 baskets containing the "makings" of a substantial dinner.

Sam Mincer, grain commission merchant on the Chicago Board of Trade, played Santa Claus by the presentation to Frank Garneau, his partner, a check for \$10,000, to the head clerk, \$1,000, other clerks \$700 each, and the messenger boys \$300.

The "American Elevator and Grain Trade" desires to express its thanks to many friends for Christmas cards, calendars and holiday greetings of good will. Many of those cards were very beautiful and the calendars will prove a handsome as well as useful wall ornament in any grain dealer's office.

"Over and Back" is the story of a "happy journey to Europe and back again" by Bert A. Boyd of Bert A. Boyd Grain Company of Indianapolis, Ind., who made the journey early in 1920 with his neighbor and friend William B. Cooley, formerly a grain shipper of Hartford City, Ind. Bert sent the book to his friends as a Christmas souvenir. It tells all about passports, travel bureaus, visas, "red tape"

at the pier—pretty useless information as far as we are concerned. But when we came to the story of "baybee" in Paris we sat up until one o'clock to finish it.

J. Carroll Fahey, of John T. Fahey & Co., grain exporters of Baltimore, Md., was recently chosen a director of Brinkmann & Co., a new investment corporation formed under the laws of the State of Delaware. The company has offices in the American Building.

Henry W. Rogers, formerly of H. W. Rogers & Bro., and member of the Chicago Board of Trade since the time when commission men handled everything from hides to grain in South Water Street, has sold his membership. He recently attained the age of 90 years.

Charles L. Niemeier, of the Schultz & Niemeier Commission Company of St. Louis, Mo., who has been ill for some time, is making very rapid progress toward recovery. His friends hope to see him out in a short time although his plans include a trip South before he resumes his regular work.

Milton Rich has retired from the firm of Murphy & Rich of New York City to take charge of the Armour Grain Company's offices in the Produce Exchange. Henry Dusenbury, formerly manager, has been placed in charge of the up-state business of the company with offices in Buffalo and Syracuse.

J. A. McCreery & Son of Peoria, Ill., have removed their general offices from the Board of Trade Building to larger quarters in the Peoria Life Building. They will act as correspondents for Bartlett Frazier Company of Chicago, and maintain private wires connecting all principal markets.

McArty & Hall is the style of a new firm to engage in the grain business at Des Moines, Iowa. They have offices at Room 721 Hubbell Building. A. McArty was until recently mahager for W. H. Perrine & Co., and Frank Hall filled a similar position for the Des Moines Elevator & Grain Company. Both men are well acquainted in Western grain circles.

The congratulations of very many friends were showered on the last of December on John Arthur Aitkins, private secretary to Secretary John R. Mauff, of the Chicago Board of Trade. Mr. Aitkins has been in the secretary's office on the Board for upwards of 25 years. The bride, Miss Mollie Breen, served 10 years in a similar position in the secretary's office.

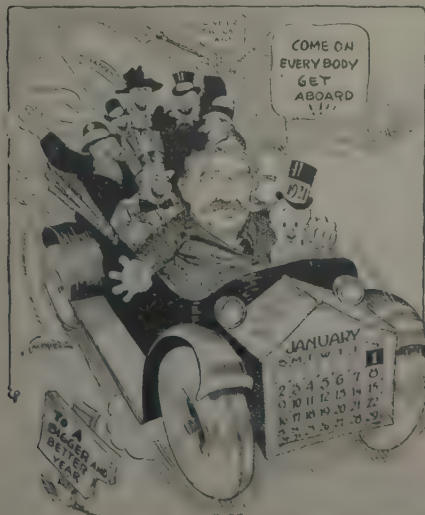
McQuillan & Currus, a successful grain and hay firm of Cincinnati, Ohio, dissolved partnership late in the year and two firms were organized to start business on January 1. The McQuillan Company was organized by W. R. McQuillan to conduct a grain and hay receiving business with offices at 98 Duttonhoper Building, while Mr. Currus continues as the Currus Grain Company at 609 Lyric Building.

Plans have been perfected by Julius H. Barnes, formerly head of the United States Grain Corporation, and W. F. Piazzek, second vice president in charge of the Kansas City office of the Grain Corporation, for the organization of a grain export house to commence business at Kansas City early in the year. It will be under the management of Mr. Piazzek and do business principally through the Gulf Ports and will be a subsidiary of Mr. Barnes' export company at Duluth.

The Chicago Board of Trade, in addition to other charitable activities during holiday season, made gifts of bags of flour to many poor families. Secretary John R. Mauff, treasurer of the flour fund, reported \$2,433.75 contributed by members. Those delivering the flour on Christmas day included Weighmaster H. A. Foss, Harry Avery, A. E. Williams, Capt. Wm. Heptig, R. J. Mansfield, Fred Babcock, Chas. Stone, Al. V. Booth, Maj. J. M. Allen, Harry Shaw, and Walter W. Smith.

Frank W. Donaldson has been admitted to partnership with E. W. Wagner and Ernest Tietgens in the firm of E. W. Wagner & Co., of Chicago. Mr. Donaldson started 10 years ago with the company as an assistant cashier and five years ago was

### "THERE IS WORTH IN SOUTHWORTH SERVICE"



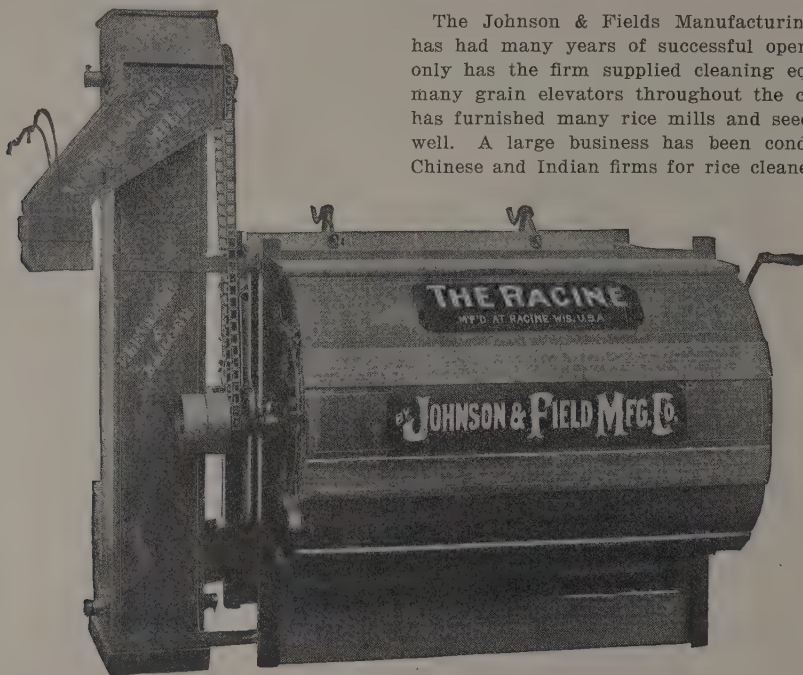
—From Southworth & Co.'s New Year's Card



made general manager of the business. The firm was established 33 years ago by Mr. Wagner and Mr. Tietgens and has grown to one of the best known and strongest firms on the Chicago Board of Trade. It maintains 50 branches throughout the country.

## A SEPARATOR FOR SERVICE

The business of cleaning grain and seeds at the country elevator is so well established that in most houses it has become a part of the routine work.



FRONT VIEW OF THE IMPROVED WAREHOUSE FANNING MILL

Cleaned grain makes better grade at the terminal and saves on the freight bill; cleaning seed is a business which farmers are more and more depending on the elevator to do, as better equipment is usually maintained. There is certain profit in both operations, but the choice of equipment should be made only after careful investigation.

In its Improved Warehouse Fanning Mills, the Johnson & Fields Manufacturing Company of Racine, Wis., offers a machine which has given instant satisfaction wherever it has been put into use.

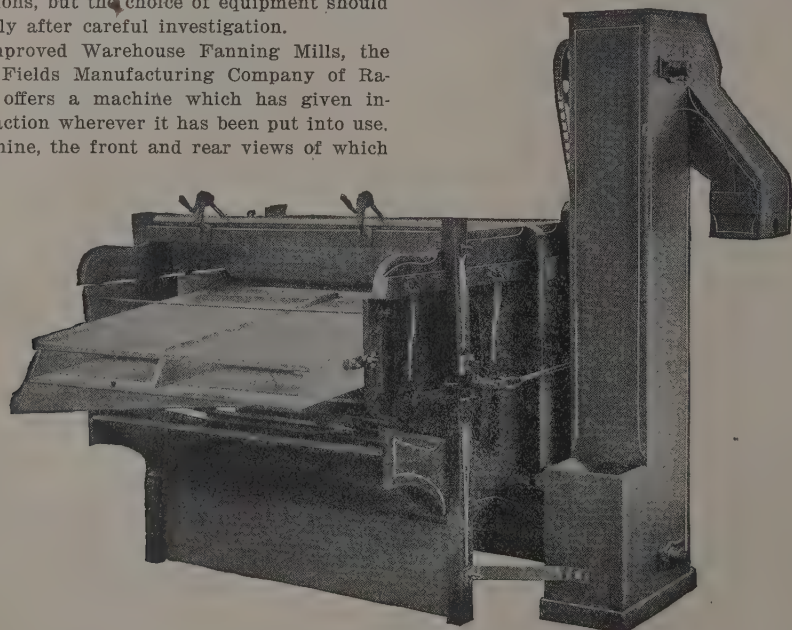
This machine, the front and rear views of which

by the number of products that come to the elevator.

The elevator and bagger attachment is an interesting and important feature of the mill, for it easily saves the labor and service of two men. The elevator cups are of heavy tin, reinforced by steel-band rim all around, and mounted on a chain running over regular sprocket wheels.

The hopper which feeds the mill has adjustable screws which regulate the grain feed. In fact every detail of the machine is worked out with the greatest care to insure economy of operation and long service.

The Johnson & Fields Manufacturing Company has had many years of successful operation. Not only has the firm supplied cleaning equipment to many grain elevators throughout the country, but has furnished many rice mills and seed houses as well. A large business has been conducted with Chinese and Indian firms for rice cleaners, and the



REAR VIEW OF THE JOHNSON & FIELDS MILL

are shown, is constructed to endure many years of hard service. It is made of hard wood which is kiln dried in the company's own plant, and the iron work is extra heavy. The wearing parts are thoroughly chilled and their accuracy reduces friction and power required.

Each mill is furnished with a wheat hurdle with top sieve of zinc, spout attached, two wheat screens (one square and one long mesh), one barley sieve, one oat or corn sieve and a screen board. The company also can supply sieves and attachments for cleaning and separating Clover, Timothy, flax, Orchard Grass, hemp, peas, all kinds of beans, rice, coffee and peanuts. Its usefulness is only limited

export business to Mexico has reached large proportions. The cleaners are favorably known throughout the world wherever grain and seeds are handled commercially. Perhaps a near neighbor of yours is using one of them. The company would be

glad to tell you who he is if you ask, and would also like to send one of its new illustrated catalogs.

## WITHDRAWAL OF PROPOSED INCREASED DEMURRAGE CHARGES

Under date of January 10, Manager J. S. Brown of the Transportation Department of the Chicago Board of Trade, advises as follows:

"In our Bulletin 517 we advised that the Interstate Commerce Commission and Illinois Public Utilities Commission had suspended the operation of the proposed increased demurrage charges which

the carriers had published to become effective December 1, 1920.

"We would now advise that the carriers, after conference with shippers, have concluded to withdraw the proposed increased demurrage charges. Therefore, there will continue in effect the present demurrage charges, which are, after the expiration of the free time, \$2 for each of the first four days and \$5 for the fifth and each succeeding day."

## GRAIN LEGISLATION HEARINGS

The House Committee on Agriculture is now conducting hearings on five bills which aim at the control or the dissolution of the grain exchanges. The grain trade is well represented at these hearings, unfortunately not as a unit, however, and one or other of the bills may be reported out of committee to take its place in the regular order in the legislative hopper.

The Tincher (Kansas) Bill, H. R. 14657, corresponds to the much talked of Capper Bill in the Senate, and provides for a 10 per cent tax on all future trades of grain or cotton. This, of course, would be prohibitory and would eliminate the practice.

H. R. 14654, introduced by Representative Dickinson of Iowa, is similar in its taxing features, but different in its details.

Representative Hock of Kansas and Representative Caraway of Arkansas have introduced H. R. 15122 and H. R. 14742, respectively, prohibiting the use of interstate mail, telegraph or telephone service in making sales for future delivery of grain or cotton unless the seller shall own the commodity offered for sale or own the ground upon which it is growing.

H. R. 14667 was introduced by Representative Steenerson of Minnesota with the object of compelling grain exchanges to accept co-operative companies to membership.

## SCALE REQUIREMENTS

To assure protection on loss and damage claims, under the provisions of I. C. C. Docket 9009, all new scale installations should conform to the rules suggested by the Interstate Commerce Commission. These provisions do not govern scales installed previous to the date on which the rules go into effect provided such scales meet the required tests for sensibility and accuracy. Last month we published that portion of the rules covering the testing of automatic scales. Herewith are given the rules on the operation of automatic scales. In succeeding issues will be published the rules for installation and design of automatic scales and all rules for hopper and track scales.

### OPERATION OF AUTOMATIC SCALES

2. Scales shall be kept clean at all times.
3. Weighers shall keep the scale in perfect balance at all times.
4. Weighers shall go over the scale thoroughly before weighing any carload of grain, to be certain that the hopper and mechanism of the scale is working freely.
5. Weighers shall make daily examination of the spouts between the scale and car and car and scale, and any other equipment used in handling the grain between the scale and car and car and scale to be certain they are grain tight.
6. If the automatic scale is provided with a compensator which is not self-adjusting, it shall be adjusted at the beginning of the weighing of each carload, and in addition, it shall be ascertained, at least four times during the weighing of any car, that the compensator is correctly adjusted.
7. If the automatic scale is provided with a self-adjusting compensator the scale shall be inspected at the beginning of weighing each carload, to see that it is in operation, and it shall be ascertained, at least four times during the weighing of any car, that the compensator is in correct adjustment.
8. The records of both "tallies" of the contents of every car, and also of any other grain passed through the scale for any purpose shall be kept in writing.
9. No record obtained from any counter or tally



not directly mounted on an automatic scale shall be used for determining the weight of the grain passed through the scale.

10. A record shall be kept of the number and equivalent values of the weights used in weighing each car load of grain.

11. The empty balance of the scale shall be tested and adjusted, if necessary, at frequent intervals. In this, care shall be taken that the hopper is empty and the operating weights are all removed from the weight box or hanger weights from the end of the beam, and all sliding poises shall be set at zero, and the mechanism shall be clear of the hopper. In all cases, scales in service shall be balanced at least once a week.

A PROGRESSIVE HOUSE IN CENTRAL ILLINOIS

One of the chief evidences of progress in the grain business is in the character of country elevators. A dozen years ago it was rare indeed to find at a shipping station any kind of house except of the old style cribbed construction, sometimes ironclad, but more probably not with even this protection. Of late years, however, the design and construction of country elevators has improved beyond measure. Now substantial concrete structures are taking the place of the wooden houses, and they are planned and equipped with conveniences and money saving devices that the older generation of dealers never dreamed of.

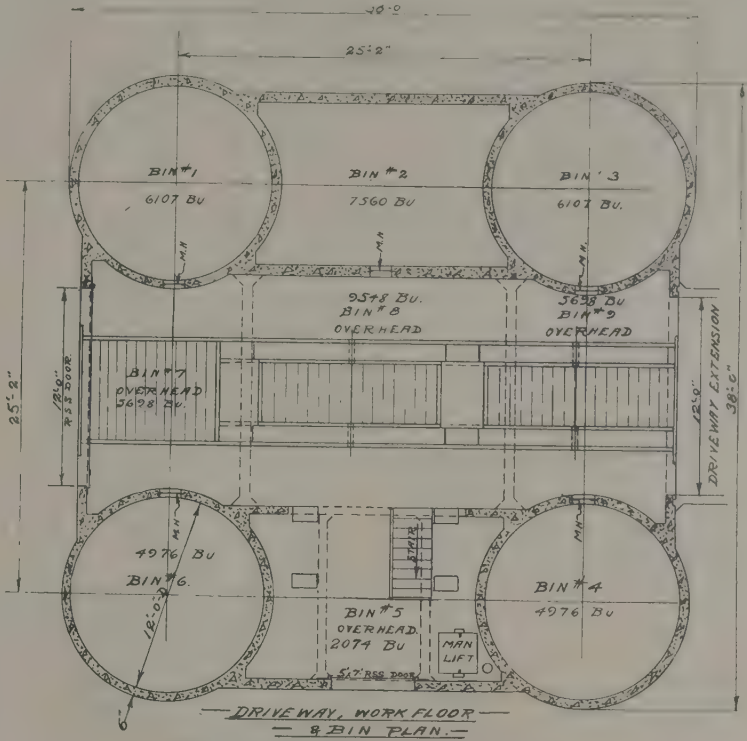
A typical example of this new type of elevators may be found at Mansfield, Ill., operated by the Farmers Elevator Company. Mansfield is in Piatt County only a few miles (measured by good roads and automobiles) southeast of Bloomington. The house was designed by Ballinger & McAllister of

vator within it. Corn, oats and wheat are handled, and in addition the company carries a general line of farm supplies which bring the neighborhood farmers to its doors at all seasons of the year.

The plant consists of the elevator proper and an office building. Both are of concrete construction

by far the cheapest form of transportation. The office is roomy and well equipped, and while loafing is not encouraged, it is rare to find it without one or more farmers transacting business there, or discussing the prospects ahead.

The elevator consists of four circular tanks, 12



CROSS SECTION PLAN OF THE MANSFIELD PLANT



PLANT OF THE FARMERS ELEVATOR COMPANY, MANSFIELD, ILL.

Bloomington, and contains provision for a wide variety of activities.

(The plant has convenient connections with the Wabash and the Big Four Railroads and is located in a region which taxes the capacity of every ele-

and of pleasing proportions. Beside the office is a Fairbanks Auto Truck Scale of large capacity. Farmers in central Illinois are finding that the time saved by the use of an auto truck for hauling grain, is well worth the cost and is, in most cases,

feet in diameter and 67 feet high, with a head house above. A driveway runs through the center of the building, while between the tanks and above the drive are five other bins. The total storage capacity is 40,000 bushels. The house can take in 5,000 bushels an hour and can ship out 2,500 bushels. Two B. S. Constant Dumps take the grain from the farmers' wagons to the elevator boot and it is then carried to the automatic scale floor and distributed to any of the bins. All of the legs and spouting throughout the plant are of steel.

In addition to the above equipment the house has a B. S. Constant Cleaner of 1,500 bushels' capacity; a B. S. Constant 1,000-bushel Corn Sheller and a manlift.

The power is furnished by a Fairbanks Type "Y" Oil Engine of 25 horsepower with rope drive to the head of the house.

The Farmers Elevator Company handles a general line of farm supplies which keeps the plant open and busy the year round and employs the entire organization intact. This, of course, is a very decided advantage, and the effect is shown in the prosperity and good will which the company enjoys.

REPAIRING LEAKING CARS IN TRANSIT

The Chicago & Northwestern Railroad, says Owen L. Coon, railroad claim attorney at Chicago, has a system in use which in many cases results in the discovery of leakages and repairs en route on cars that to the shipper apparently seem clear records. It consists of nothing more than a post card stating that such and such a car was found leaking en route and repaired—such cards being sent to the Freight Claim Department of the Chicago & Northwestern Railroad at 226 W. Jackson Boulevard, Chicago, by shippers as well as railroad men and all claims filed are checked against them. In a number of cases the claims which are apparently clear record when sent to me by the shippers have had such a card attached to them when settlement of the claim was ready to be made and have been paid in full.

Many grain dealers find cars leaking en route and repair them. The number of such cars are frequently reported in grain journals. But whenever such repairs are made by the grain dealers and



evidence of such repairs does not get back either to the shipper or to the freight claim department of the railroad against which the claim is filed, the shipper is penalized by having to take a compromise settlement through the car being listed as a clear record by the railroad or else go to the expense of bringing suit.

All freight claim departments should establish a system like that now used by the Chicago & North-

western and the shippers on the Chicago & North-western Railroad should co-operate with that railroad by sending notice of leakage and repairs to the railroad as suggested above. To repair the car and not send the notice means that the shipper may be penalized more through compromise settlement on an apparently clear record car than if you had done nothing to stop the leakage and allowed it to be ascertained by proper inspection at destination.

## TRADE NOTES

The Humphrey Elevator Company of Faribault, Minn., manufacturers of the Humphrey Employees Elevator, sent out appropriate holiday greetings to their friends.

H. P. McDonald has recently gone with Barnard & Leas Manufacturing Company of Moline, Ill., as special sales agent. Mr. McDonald makes his headquarters at Chicago.

The Star Engineering Company has succeeded the White Star Company, grain elevator and flour mill constructors, of Wichita, Kan. The new company is incorporated for \$75,000, and officers are, O. C. Rynders, president; I. D. Allison, vice-president; Tom Curliss, secretary and treasurer.

The directors of the Leonard Construction Company of 37 South Wabash Avenue, Chicago, and 51 Maiden Lane, New York, declared a stock dividend from surplus at the close of the year, of \$1,000,000, equivalent to 200 per cent. Another stock dividend of equal amount was expected to be declared early in 1921.

L. J. Ziegler, engineer with Nurdyke & Marmon Company of Indianapolis, Ind., known as leading mill builders and manufacturers of grain elevator machinery, remembered his friends during the holiday season with a Yuletide card bearing good wishes and expressions of hope for a prosperous New Year.

The Ellis Drier Company of Chicago, will be remembered throughout the year by a very useful Yuletide gift. It consists of a desk calendar and memory leaves, bound in on extra heavy embossed leather cover. The Ellis Grain Drier and Ellis Rotary Driers have enjoyed large sales during the past year and have made friends wherever installed.

On January 1, Hoerner & Wyatt, engineers, succeeded the Sherman Engineering Company, of Kansas City, Mo. The change was brought about by the death of J. H. Sherman, the former president of the Sherman Engineering Company. Roy M. Wyatt and O. H. Hoerner were connected with the old organization and will continue the business as designers of grain elevators and flour mills.

The Western Fire Appliance Works of Chicago, Ill., noted a very large increased demand during 1920 for the Zeleny Thermometers for telling the temperature in grain bins. The convenience and saving made by this appliance has become more and more apparent to the operator of the terminal house, until now no up-to-date elevator is considered complete without the Zeleny System.

The many friends of W. F. Leggett of Evanston, Ill., manager of the Publicity Department of Webster Manufacturing Company, Chicago, Ill., received a personal visit from him during the holidays, bearing a message of New Years cheer. Mr. Leggett, however, was not in his own person, but an outline picture taken in his library at home. The message is a personal one anyway, says Mr. Leggett.

The Macdonald Engineering Company of Chicago, Ill., has the contract for 10 large grain elevators which the California Farm Bureau Elevator Corporation will build in the grain centers of California. The construction program, according to W. O. Heileman, secretary of the corporation, will involve the expenditure of about \$1,000,000. The Macdonald Engineering Company has made ex-

tensive preparations in its construction plans, in the matter of office space and organization, at 149 California Street, San Francisco, under the personal direction of President James Macdonald.

The Milwaukee Bag Company of Milwaukee, Wis., is pushing the work rapidly forward on their new building which, besides offering more convenient advantages for manufacturing, will greatly increase the capacity of the plant. With its completion they will have four stories one block long, the new addition being 192x85 feet. The changes include the removal of the general offices to the top floor where they will have much needed room. The buildings will be finished early in 1921 if nothing unexpected causes a delay.

Blaylock & Knapp, steel contractors with main offices in the Monadnock Building, Chicago, Ill., recently purchased 15,000 square feet on the Chicago, Milwaukee & St. Paul Railroad at School Street, as an addition to their present plant. The new ground and building will more than double their present output. The firm specializes in steel work for grain and coal handling plants almost exclusively and the quality of their work has resulted in a very large demand from the two named industries.

### NEW ITALIAN REGULATIONS

One of the chief difficulties of the grain trade in this country is that it has to deal almost entirely with government agencies in selling abroad. In most of the countries of Europe bread is still subsidized and the Government controls the bread grain traffic, selling to millers at less than cost and regulating the price the baker receives for his bread. A country is out of the American market entirely or is making extensive purchases, both of which affect the market and are responsible in large measure for the violent fluctuations we have witnessed from day to day. But gradually a change for the better is coming.

The Italian Ministry of Food has issued a decree permitting the importation of grain by private individuals and companies providing the grain is to be used in the manufacture of macaroni for the export trade, according to the American consul at Naples.

### STORING COAL IN SAFETY

Grain dealers who handle coal as a side line have had many problems to contend with in the last two years, although the business has been extremely profitable for many of them. Transportation has contributed a large share of the problems, and of these early purchase and storage have been prominent.

An elaborate study has been made of Bituminous Coal Storage Practice by the Engineering Experiment Station of the University of Illinois, and the result is published in Bulletin No. 116.

In the preliminary considerations the report advises preparing a suitable place for storage before coal arrives. Such a place should be dry and well drained; if not drained naturally drains should be provided about the storage pile, not underneath it, as a drain beneath a pile may produce an air current up through the coal and thus assist spontaneous combustion. The ground should be cleared

and leveled, without refuse or vegetation. Concrete is, of course, preferable.

To take advantage of transportation, coal should be stored from May to September, but in the hot months must be watched carefully. The spontaneous combustion of coal is due largely to the oxidation of fine coal; consequently, the liability to spontaneous combustion in stored coal is greatly reduced and in many cases eliminated if dust and fine coal can be kept out of the pile.

Hence, if possible, cleaned, screened coal of a uniform size should be chosen, the larger the lumps the better, so as to give the greater number of voids in the pile. Coal of one size is better than a mixture of sizes.

Sized coal should not be stored upon a foundation of fine coal.

The coal should be handled in such a way as to prevent breakage as much as possible. If there is a choice of coals for storage, the least friable should be chosen and the one in which there is the least fine material.

While many varieties of mine-run coal cannot be stored safely under ordinary conditions because of the presence of fine coal and dust, such coal has been successfully stored in small, low piles. In storing mine-run coal, it should be piled uniformly so as to prevent segregation of the sizes.

As fine coal or slack is more liable to spontaneous combustion than clean sized coal, it should be very carefully watched in storage to detect evidence of heating.

#### METHOD OF PILING

(1) Coal should be so piled for storage that any part of the pile can be moved promptly if necessary.

(2) Coal should be so piled that air may circulate freely through it and thus carry off any heat generated, or else so closely packed that air cannot enter the pile; i. e., under water storage conditions should be approximated as nearly as possible.

(3) Stratification or segregation of fine and lump coal should be avoided, since an open stratum of coarse lumps provides passage for air to reach the fine coal but not in sufficient quantity to keep down the temperature of the pile. Coal should be spread in horizontal layers and not dumped in conical piles, for in the latter case the fine coal stays in the center at the top of the pile and the lumps roll to the bottom.

(4) The depth and area of storage piles will be determined largely by the storage space available and the mechanical appliances to be used. Other conditions being equal, the deeper the pile and the greater its area the greater the difficulty in inspecting it, and in moving it quickly if necessary. Hence, a number of small piles, if practicable, are better than one large pile. Lack of space, however, usually prevents such spreading out of the coal. It is impossible to specify exact heights as so much depends upon the kind of coal and upon local conditions.\*

(5) The hazard of spontaneous combustion seems to be independent of whether the coal is piled in the open or under cover.

The exact effect of moisture in connection with spontaneous combustion is not known, and, as shown in later pages, the evidence of laboratory experiments is contradictory.

The repeated wetting and drying of coal seems to increase the tendency to spontaneous combustion. This may be due to the breaking up of the coal which such alternate wetting and drying occasions, even if there is no chemical reaction between the water and the coal. It is not wise to put wet coal into a pile, or to store coal on a damp base if it can be avoided. After a rain or snow-storm a coal pipe should be carefully inspected and watched.

\*The Railroad Administration has suggested piling coal for railroad storage not over 12 to 15 feet in height when the track is placed on top of the coal pile, and not over 20 feet when a locomotive crane is used.

The Home Insurance Company advises against piling in excess of 12 feet, or more than 1,500 tons in any pile, and suggests trimming the piles so that no point in the interior is more than 10 feet from an air cooled surface. These are wise precautions, but frequently impossible of application on account of lack of storage space.



## A RECORD OF ACHIEVEMENT

The B. F. Goodrich Rubber Company, pioneer manufacturer of mechanical rubber goods and other rubber products, is now entering upon the second half of a century of progress. The first half of the century was completed December 31, the company



PRESIDENT B. G. WORK

having been incorporated December 31, 1870, by Dr. Benjamin Franklin Goodrich.

Inasmuch as the growth of Akron during the last two decades has resulted directly from the expansion of the rubber industry, the anniversary had real significance to the people of the city. The industry literally made Akron, lifted it out of ob-

manufacturing in a small, two-story brick building with a force of 25 employees. This small factory has grown until today it comprises 63 giant buildings covering 110 acres of ground.

When Dr. Goodrich built his factory in Akron, the field for the use of rubber products was limited. It was just beginning to be appreciated as a factor of industrial life. There is now scarcely an industry that does not use rubber products of some kind. Rubber has silently woven itself into the very fabric of modern life. Wherever men work—whether they are forging rails, girders or dreadnaught armour, or weaving the daintiest fabrics—rubber in a thousand forms is their help and mainstay.

Dr. Goodrich, who had sincere faith in the future of the rubber industry, was looked upon as a visionary—and so he was, but above all he was a worker, striving to make his vision a reality. When folk joked about his “smelly little shop on the canal,” he never let down in his efforts. “Let us make goods destined for service,” was the simple principle he often voiced.

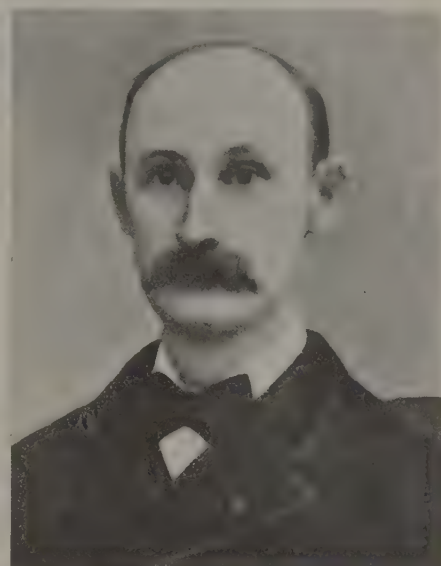
The first article produced was rubber hose. Dr. Goodrich once saw a friend's home burn down be-



1870—THE FIRST GOODRICH FACTORY

ities in the grain handling line and was one of the first subscribers to the “American Elevator & Grain Trade.” Their “Legrain” and “Carigrain” Belts are known to every elevator operator.

The manufacture of automobile tires followed naturally from Goodrich's early experiments in perfecting rubber shod wheels. Solid rubber tires for



DR. B. F. GOODRICH, FOUNDER

carriages were made first. Then came the pneumatic tires for bicycles, made in large numbers when the “bike craze” swept over the country. Auto tires came next, the same fundamental principles being used in their construction as for bicycle tires. With the universal use of the motor car today, it is difficult to realize that as short a time ago as 1896



1920—THE GOODRICH FACTORIES FIFTY YEARS LATER

curity and placed it on a plane with the foremost manufacturing centers in the country. Consequently the people of Akron feel duly grateful to Dr. Goodrich, the man who brought the industry to the city.

Dr. Goodrich, who was a physician by profession,

cause a defective hose burst when the firemen turned on the pressure. He determined then and there that he would some day devise a hose that would stand up under pressure and when he came to Akron he straightway began to put his determination into effect. He succeeded, and Goodrich is still making hose—miles of it, for use in every land under the sun and for every purpose.

It is related that one time when Dr. Goodrich was trying to find a market for his goods, he tried to sell rubber hose to the fire department of Cincinnati, which still used leather hose. The firemen scoffed at Dr. Goodrich's contention that rubber hose would be much superior to the leather, and refused to buy. It wasn't many years, however, before Dr. Goodrich had the laugh on them for rubber fire hose soon came in universal use.

After starting with the manufacture of hose, Goodrich added article after article to its line of manufactured goods until today approximately 30,000 different rubber products are made, filling an almost infinite variety of needs. They can be classified into five general divisions, each ramify into numerous sub-divisions: Mechanical goods, rubber footwear, druggists sundries, hard rubber products and tires—both pneumatic and solid.

Among the earliest of the Goodrich products was belting. Mr. Goodrich saw the wonderful possibil-

Goodrich produced the first American clincher type tires for automobiles.

In the golden anniversary greeting to employees and thousands of customers throughout the country, President B. G. Work said in part: “We feel a thrill of pride as we look back over the years and



1920—EMPLOYEES LEAVING THE PLANT

realize the part we have played in the development of the rubber industry.”

The Goodrich company commemorated the golden anniversary by publishing an attractive 48-page book called the “Golden Year of Goodrich” telling of



1870—THE FACTORY FORCE

entered the rubber business as result of having acquired a rubber factory at Hastings-on-the-Hudson in a real estate deal. Seeking financial help, he was attracted to Akron where a group of progressive citizens promised to back him. He began



the romance of the rubber industry, its history, and of what great importance it has been in the progress and development of the world. The book was written by Wilbur D. Nesbit and illustrated by W. T. Benda, the famous Polish-American painter.

### CO-OPERATIVE MARKETING IN CANADA

Farmers of the prairie provinces of Canada have formed an organization to handle all farm products of members. It will be put into operation as soon as 60 per cent of the farmers sign up.

The proposed plan of marketing, which is fathered by the Canadian Council of Agriculture, is based on the great co-operative organizations in California, which last year marketed over \$225,000,000 worth of farm products in that state. The cardinal features include:

1. The formation of a wheat pool into which all of the wheat produced by the members of the association will go. When this wheat is sold, each member will receive his share in proportion to the amount of grain that he furnishes, due allowance being made for grade.

2. A contract which absolutely binds each member to deliver all of his wheat to the association for each crop from 1921 to 1925, inclusive, except the amount needed for seed and feed. He will be required to pay damages to the association if he sells his wheat elsewhere.

3. Utilization of the 650 farmer-owned line elevators in western Canada to take care of the physical handling of grain, with the idea that they will eventually be taken over by the new marketing association. For the time being, the elevator companies will act simply as agents for the marketing association.

4. Operations will not begin until 60 per cent of the wheat acreage of Manitoba, Saskatchewan and Alberta is pledged to the association, or about 10,000,000 acres.

The idea is to form a central selling agency that will sell upon the world's markets the wheat belonging to the association, which in turn has been furnished by the farmer members. An advance will be paid upon the wheat at the time of delivery. The wheat will be pooled according to grade and sold when the central selling agency sees fit. The balance of the money will be paid through the year in installments until the entire amount received is paid to the farmers except the cost of operating the association. Each farmer will receive the net average price for the grade of wheat into which his product has fallen.

### A MILESTONE TOWARD NORMALCY

A step in the direction of decontrol and normal trade is to be found in the following report from England:

The English Royal Commission on Wheat Supplies informs millers that they are free to purchase for control account and for use in their mills, imported wheat which is the property of persons other than the Royal Commission on Wheat Supplies, and which has actually arrived at a port of discharge or port of call in the United Kingdom, according to the American Agricultural Trade Commissioner at London. The fact that this permission applies only to wheat which has actually arrived in a British port is of vital importance. Under no circumstances may a miller purchase wheat in a forward position for control account, except through the Royal Commission on Wheat Supplies.

The price paid for such wheat must not exceed the equivalent of the selling price of the Royal Commission for wheat of the same description on the day of purchase. In the event millers make such purchases they must notify the director of statistics, flour mills control committee, and give full particulars specifying the quantity, quality, description, price and terms of sale immediately such purchase is made. The Royal Commission on Wheat Supplies retains the right to vary its price for any description of wheat from day to day without notice.

OUT of 130 varieties of Australian wheat tested under California conditions, three varieties, Federation, Hard Federation, and White Federation, have been recommended for adoption.

## Some Comments on Future Trading

### A Few Answers to L. C. Breed's Article and Proposals of Last Month on Trading in Grain Futures

THE agitation against future trading is without doubt the main point of interest with the grain trade at the present time. There are now pending in Congress, five distinct bills, including the Capper Bill, which is the Tincher Bill in the House, providing various measures of regulation on future trading, to say nothing of the swarm of similar legislation pending in most of the granger states. The article by Mr. L. C. Breed in our last issue on "Trading in Grain Futures" has created considerable comment. We have received a great many letters on the subject, but many of the writers request that their communications be not printed. A few of the comments on the subject follow:

#### FUTURE TRADING NECESSARY

*Editor American Grain Trade:*—Operating a terminal elevator at one of the smaller interior markets, we have not availed ourselves of the hedging privileges to the extent that operators on the larger markets do. Possibly we are not as competent to judge of the necessity for trading in futures as those who have had more and closer contact.

In considering the necessity for trading in grain futures, it seems to us the question should be, "Does such trading serve a good purpose?" Grain must be held for later consumption and whoever owns it is a speculator, i. e., he profits or loses by advances or declines of the markets. If the owner of grain wishes to sell for future delivery, it is certainly a right that should not be restricted, and if this right is not to be restricted neither may the right of anyone to purchase, and transactions of this kind certainly are of service to society.

It is doubtful whether the right to sell short, i. e., sell grain for future delivery that one does not possess, serves any good purpose. If it does not, this privilege should be restricted or prohibited.

The practice of hedging cash purchases by sales for future delivery has led so many country dealers into disastrous speculation that it is doubtful whether the practice has been of real benefit to the trade as a whole.

Trading in grain futures should be restricted to such proportions as will best serve society, and we believe that the present agitation will result, not in prohibition, but in wise restrictions by our grain exchanges.

Yours truly, E. BOSSEMEYER, JR.  
Superior, Neb.

#### FURTHER SUGGESTIONS ON FUTURE TRADING

*Editor American Grain Trade:*—The article by L. C. Breed on "Trading in Grain Futures" is timely and of interest. If a discussion of the subject can clear away any objections to the system as it is operated at present, then the whole trade should welcome the opportunity, although Mr. Breed's suggestions may not be, and I do not believe are, in line of improvement.

First of all, we may start with the fundamental fact that future trading is an economic necessity, if the spread between producer and consumer is to be kept within reasonable limits. If we admit this premise then it follows that the wider the trading interest is, the more perfectly the system works. Mr. Breed's proposed Rule 1, would limit trading to actual handlers of cash grain. If this limitation were imposed it might frequently happen that both sides of the market would not be represented in the pits at all times and offers might go for considerable periods without a taker. Price fluctuation would be increased materially and there would not be a constant world price register. Cash handlers could not know at all times the values of the stocks they hold so that for their own protection they would operate on a considerably wider margin.

Proposed Rule 2 has some features of interest. The registration of traders is unnecessary and on an exchange like the Chicago Board of Trade would require clerical work out of all proportion to its value. The opening for inspection of clearance records has much to recommend it, for a general knowledge of the amount of outstanding interest would make manipulation more difficult.

Proposed Rule 3 has the same objections as Rule 1.

As suggestions are requested, I will offer one for further discussion. The danger of corners has been

safeguarded in two ways: Increasing the number of grades deliverable on contract; and including inspected grain on track. Instead of increasing the number of grades, would it not be better to limit deliverable grain, particularly wheat, to high grade milling grades, but to allow delivery on any terminal market at the freight difference? This would protect the millers and at the same time would obviate congestion. It would be obviously difficult to manipulate all the principal markets at the same time.

Yours truly, E. G. T.

#### SPECULATION GENERALLY STIMULATES PRICES

*Editor American Grain Trade:*—I am not accustomed to writing any kind of articles for publication, but would like to present my views and opinions on Mr. Breed's proposals.

As to the matter of future trading as carried on in the exchanges of the country, it seems to me it is so valuable a function that it should not be stricken down without first experimenting with some methods of regulation that might remove the principal objection the public has to the business.

We think, broadly speaking, that the producers are not justified in contending that they are the ones injured by the practice as it now exists. The facts are that under unrestricted speculation, prices are more frequently stimulated than depressed, or in other words, speculation more frequently pushes prices up rather than down for the minute the price goes below a legitimate supply and demand basis, all users of grain will get into the market, while the same class of dealers will get out of the market when prices are pushed up too high and let the speculators have the field which they may so cultivate as to carry the price very much too high, hence the producer and holder of actual grain is in a position to unload at an inflated price.

There is a serious question running through the whole option structure and that is—can the markets be maintained so as to prevent injustice to either buyer or seller if limited to the volume of actual grain available for delivery? As it is now, doubtless the outstanding contracts for futures exceed actual stocks many times and whether or not such excessive contracts are dangerous and who is affected most is the question. I am of the opinion that some regulations that will limit trading to that class of people who are directly or indirectly interested in grain, other than simply as an individual consumer of his five bushels of wheat per annum, might tend to stabilize prices on the basis of world supply and demand, but the exact method of doing so is not clear to me. One thing I think could be done by the exchanges themselves to discourage unlimited speculation and that is to limit the number of special wire connections they have throughout the whole country. As it now is, every town or small city of any size throughout the Central States, have trading points into which hundreds of both big and little fellows congregate and practically bet on the market. The dealer who wishes to use the market for legitimate hedging is greatly in the minority and not infrequently places his order direct with the house in the market rather than with the special wire house in his community, so that hedging will not be greatly disturbed if the hundreds of offices throughout the country were disposed of.

These offices solicit and serve the real, though frequently small, speculator who is in the deal simply as a gambler or rank speculator, betting on what the price will be tomorrow. Of course, it is difficult to adopt rules that would eliminate this little



gambler, but it could be done by some licensing system and if the exchanges of the country expect to perpetuate their useful existence they will have to adopt some method of distinguishing between legitimate dealers and gamblers, for the fellow that has no business to protect by his option trades is simply betting on the market and in time he is down and out and the exchanges are branded as wrecking him or causing him to wreck himself.

It has been my privilege to see the fellows who frequent these branch houses and as a rule they last only about 30 to 90 days. You then find an entirely new set of speculators while the real manufacturer or grain dealer who uses the service for the hedging is not found among them.

The average country dealer and small miller frequently fails to get in and out of hedging contracts on a basis of profit or protection, but sustains his loss on the board transactions, so the real benefit to the general business is questionable. I am of the opinion that future trading is confronting the hardest struggle for existence that has ever come to it and the real substantial interests have the fight of their lives before them.

A great organization like the Southwestern Millers League is on record by practically a unanimous vote for the abolishment of future trading and they represent a very strong and militant people. Other millers and grain dealers throughout the country take the same view, hence the necessity for the exchanges to take a broad view of the matter and insofar as possible remove from the privileges the "offending brother" and the objectionable features.

Respectfully, SPLINTERS.

#### GRAIN EXCHANGE SYSTEM BEST

*Editor American Grain Trade:*—In the midst of the present hysteria in reference to future trading, I feel that Mr. Breed's article should be commended for his attempt to be constructive instead of destructive, but I can not agree with his three suggestions. I am firmly of the opinion that the present system of future trading is basically right and represents the most efficient and economical method of handling our principal crops that has ever been either tried or proposed.

Our cereals will continue to come on the market in greatest volume in the short period coincident with our harvests and the consumer will continue to fail to provide for his needs 24 hours ahead of his appetite, and the only proven and logical bridge for this gap is our present system of future trading.

I believe that future trading is very much like government in so far as "That government governs best that governs least." Just as our admitted ideal of government is the ephemeral condition where the honesty and brotherly love of each and every individual citizen would make any government unnecessary, so the ideal system of future trading would be that without any restrictions, whatever. But just as human frailties have forced organized governments with constitutions and laws, so is it necessary that future trading be conducted by bodies with authority for the enforcement of rules and regulations for the protection of all the parties at interest, but, if we admit the fundamentals of the system, we must admit that any restriction will detract from the basic principle and should, therefore, not be instituted unless supported by an overwhelming necessity.

Our present method as conducted on our various Boards of Trade represents the development of long years of experience in the practicalities of the business of the best minds of the grain trade and their own machinery will, as it has in the past, conform their rules with changing conditions as they arise. But, for myself at the present time, instead of advocating any further restrictions, my suggestion would be that it might be more beneficial to all concerned to remove a few now in force which have been adopted, not so much from the convictions of the leaders of the trade as from deference to an ill-advised and misguided public opinion.

My experience is that little less than 100 per cent of the criticism of the principle of future trading is based on ignorance, cupidity, or prejudice in the order named, and, at the present time, when the

farmer is being exploited by a horde of agitators, our boards of trade are a natural target for attack, and for that very reason they should be just as natural an object of defense for every sane patriotic citizen of the United States.

Yours truly,

F. G. HORNER,  
Lawrenceville, Ill.

#### REPORT ON COUNTRY GRAIN MARKETING

The Federal Trade Commission has sent to the Congress a report on Country Grain Marketing, which is Volume I of its report on the grain trade. Additional volumes dealing with other aspects of the grain trade are in course of preparation. The letter of submittal for Volume I follows:

To the Congress of the United States:

There is submitted herewith a report on Country Grain Marketing, which is Volume I of a report on the Grain Trade. This inquiry had its origin in connection with the general food investigation made by the Commission, but was later continued as a separate inquiry.

The report on the Grain Trade logically falls into four main divisions: (1) Country elevators and country grain marketing; (2) terminal grain markets and terminal cash grain business; (3) costs and profits of the present marketing system; and (4) future trading operations and their results. The present volume treats of the first of the foregoing subdivisions. The other three principal subdivisions will be treated in subsequent volumes.

This volume, the title of which is Country Grain Marketing, presents a detailed description of the mechanism employed in country marketing and a somewhat detailed discussion of country marketing methods, based largely upon schedule returns made by approximately 10,000 country elevators and warehouses located in all sections of the United States. It includes a discussion of the distribution of the various types of country elevators and warehouses, their physical characteristics, functions, and operating methods, the profits and losses on grades, dockages, and weights, the geographic and commercial movement of the grain from the country elevator, based on reported shipments of one and a half million cars, country hedging and financing, and competitive conditions during the last seven or eight years.

The country elevator or warehouse is devoted to the storage and handling of grain in the country. It buys and stores grain hauled in by the farmers in wagon lots, and combines such wagon lots into car lots, which it sells outright to various purchasers, or ships for sale to some city or town that is a point of distribution for grain either on a large or a small scale. The great bulk of the grain which is marketed in the United States is handled through such country elevators and warehouses.

Country elevators and warehouses are of two general classes, individual and line. An individual house is one operated as a unit within itself. A line house is one of two or more operated at different towns by a central organization. A number of such concerns operate more than 100 houses, and there are numerous line companies operating all the way from 25 to 75 houses. Altogether eight different types of elevators and warehouses are distinguishable—four individual, i. e., co-operative, independent, mill and maltster, and four line, i. e., commercial, co-operative, mill and maltster. Only five of these types are of major numerical importance, namely, commercial line, mill line, independent, individual co-operative and individual mill.

The commercial line is one operated for the purpose of deriving a merchandising profit from the purchase and sale of grain. A mill line, on the other hand, while it may buy and sell some grain, is usually run largely with reference to supplying the grinding requirements of one or more mills. The individual co-operative is a single elevator or warehouse operated or owned and operated by grain producers and engaged in buying and selling grain. It differs from the independent in the fact that the latter is not operated, or owned and operated by producers. On the other hand, the individual mill, like the mill line, is usually concerned largely with supplying mill grinding requirements and only incidentally with buying and selling grain for profit. In some cases the individual mill elevator does no merchandising whatever. It is, however, a single unit and not like the mill line house, one of several operated by a single organization.

Commercial line elevators are relatively most important in Nebraska and the four Northwestern States, and independent elevators in Iowa and Kansas and the states east of the Mississippi. The co-operative type is most important in Iowa, Kansas, Nebraska, Minnesota, Montana and North and South Dakota. Mill line elevators are relatively most important in Oklahoma, Kansas and Missouri, and individual mill elevators in Missouri and east of the Mississippi in Indiana, Ohio, Wisconsin and Michigan.

An outstanding development in the marketing of

grain in recent years has been the entry of the farmer into the elevator business, as shown by the growth in the number of the individual co-operative elevators organized by farmers and used by them in marketing their grain.

The average country elevator is of wood construction, most frequently the cribbed type, with a capacity of between 25,000 and 26,000 bushels. About one-half of the country elevators are equipped with cleaning machinery, and slightly less than 80 per cent handle other commodities than grain. The five principal side lines so handled, as indicated by the proportion of elevators reporting their handling, are, in order of importance, coal, feed, flour, building material and seed.

On the average the country elevator buys slightly less than 100,000 bushels of grain annually, of which about 36 per cent is wheat, 31 per cent oats, 24 per cent corn, 7 per cent barley, and 2 per cent rye. The average individual co-operative elevator, however, buys annually about 153,000 bushels, the individual mill elevator 113,000 bushels, and the independent elevator 103,000 bushels. The commercial line and mill line elevators, on the other hand, buy on the average only about 77,000 and 79,000 bushels, respectively.

About 70 per cent of the grain shipped by country elevators goes to terminal markets (those markets receiving annually more than 1,000 cars of country grain) and about 7 per cent to smaller markets (those receiving less than 1,000 cars annually). The local mills absorb 13½ per cent of the country elevator shipments and interior brokers 6 per cent; about 2 per cent goes to feeders, and approximately the same proportion to miscellaneous purchasers. Of the grain shipped to specified markets, about 71 per cent is sold on consignment, the balance being sold "to-arrive" or "on-track" to representatives of these market organizations.

About 40 per cent of the elevators and warehouses generally hedge their grain, another 10 per cent hedge it a limited extent, while about 50 per cent report no hedging. The proportion of elevator hedging in the various states varies directly with the proportion of consignment sales reported, and also directly with the extent of commission-house financing of country elevators and the proportions of line elevators reported. Hedging is usually done in the markets to which the grain is generally shipped.

A study of the profits and losses in one section of four line elevator companies on grades, dockages, and weights for three years (1914-15 to 1916-17) revealed the fact that these companies lost on grades but profited on dockages and weights, incurring a loss in profits so far as grades, dockages and weights are concerned. This does not mean, of course, that the entire business was conducted at a loss, but relates only to the three items in question. The elevator companies selected were picked as fairly representative of that type of house in that section, and while no similar statistical study was practicable for other types of houses, it is reasonably deducible that these others have had a similar experience.

Though country elevators obtain funds from numerous sources, the major portion of the financing of elevators is done by local banks, commission houses, and the head offices of the line elevator companies. Line elevators, of course, procure the great bulk of their funds from their head offices, and the individual elevators are financed chiefly by either the commission houses or the banks. Commission house financing is of great importance in the four Northwestern States. A considerable amount of such financing is also done in Wisconsin, Illinois and Missouri. In the other principal grain-producing states it is unimportant. The average maximum amount of borrowing per elevator in the crop year 1913-14 was \$12,301 and in the crop year 1916-17, \$17,309. The average rate of interest reported in both years was slightly above 7 per cent. Practically all elevators reported that they borrowed money to some extent.

The general indications are that competition in buying grain in the country is keen, especially that of the mill and co-operative elevators. The mill elevators bid for grain largely to supply the grinding requirements of the mill, and frequently do not in consequence calculate upon a merchandising profit as do the other principal types. The frequent opposition of some farmers to the line-elevator companies, their friendly attitude toward the co-operative elevator, and the inducement of stock or patronage dividends, places the latter in an advantageous position.

Competition in country grain buying affects all phases of the business. Not only grain prices, but also grades, dockages, elevation and storage charges and side lines, become subject to competitive influences, including agreements and understandings among the elevators. Country grain buying appears to be often affected by these agreements and understandings, which are not peculiar to any one type of elevator, though the co-operative elevators appear less inclined than the others to enter into such arrangements.

Respectfully, VICTOR MURDOCK, Chairman.  
HUSTON THOMPSON,  
WILLIAM B. COLVER,  
NELSON B. GASKILL,  
JOHN GARLAND POLLARD.



## NEWS LETTERS

## CINCINNATI

HARRY A. KENNY CORRESPONDENT

**T**RADE opinions that there would be an export wheat scarcity before March or April had a depressing effect on futures here during the past month. During the early days of December, buyers were indifferent although during the latter part of the month general firmness and sharply higher options prevailed. Receipts of good milling quality at the local Exchange were disappointing, the trade finding it difficult in some cases to fill orders.

Interest in oats was lacking but the receipts sold slowly and mainly to elevators. The market was weak generally, although abrupt changes were noted on several days of the month. Demand for corn was exceptionally slow, with shippers the principal buyers of moderate offerings, though a fair percentage of the offerings was absorbed by industries. During the entire month the Yellow grades continued scarcest. Low grades comprised the bulk of the receipts.

The heavy offerings of inferior and no-grade hay was mainly responsible for a weaker and lower market during the week. Concessions in process, however, stimulated the demand and practically all the congestion in the terminals was cleared at the end of December. Alfalfa ruled dull and easy almost throughout. Light receipts toward the end of month stimulated a slightly firmer tone.

At a special meeting of the Board of Directors of the Cincinnati Grain and Hay Exchange, applications for a share of stock in the company were received and later granted to the following men: F. F. Collins, John E. Collins, W. R. McQuillan, Vinton Perin, E. A. Smith, O. C. Murchmore, H. E. Niemeyer. The first requirement for membership in the Exchange is the ownership of a share of stock of the company. The men designated became members of the Exchange after their names had been posted on the bulletin board for 10 days. The men were admitted according to a recent amendment to the by-laws of the Exchange which states that may be established. A large number of grain dealers, heretofore not eligible, will make application and become members of the Exchange if voted upon by members of the Executive Committee.

George H. Lewis, of the Lawrenceburg Roller Mills, of Lawrenceburg, Ind., is recovering from a brief illness. He is expected to resume his duties as an official of the mills within a week.

Members of the 1921 Nominating Committee of the Cincinnati Grain and Hay Exchange, composed of the following men: George Keller, chairman, Sam Bingham, E. Fitzgerald, Dan B. Granger and H. H. Hill, met recently and chose 12 candidates for members of the Board of the Board of Directors of the organization. The following candidates were chosen: Max Blumenthal, Sam Bingham, Henry M. Brouse, John G. Broxterman, F. B. Edwards, Dan B. Granger, Ralph Gray, H. H. Hill, Earl J. Kramer, Charles S. McGuire, B. H. Wess and W. A. Van Horn. The annual election will be held on January 20 at the local headquarters of the Exchange. Six of the 12 candidates will be elected. Of this number, five will serve for a period of three years, and one for a period of two years. The terms of the following present directors will expire on January 25 and they will be succeeded by the successful candidates: Henry M. Brouse, Murray Eisfelder, C. S. McGuire, W. A. Van Horn, B. H. Wess and Ralph Gray.

Shippers in this district report that they find that the hay plugging system operated in Cincinnati, the one-price basis for the contents of the car, enables the shipper to form a more accurate basis of value as to the character of the hay in his territory and what it will realize when offered on the Cincinnati market for sale.

Witt A. Daniel joined the flock of winter vacationists in this district when he left in company with D. W. Hopkins and Fred Winkler of the Mutual Commission Company for Reel Foot Lake, Tenn.

Dissolution of partnership of eight years' duration was announced last month by Frank J. Currus and William R. McQuillan, in the hay and grain business as the Currus-McQuillan Grain Company. The separation was by mutual agreement. Mr. McQuillan has entered into partnership with William B. Riley,

which is known as the W. R. McQuillan & Co., with offices in the Duttonhoefer Building. Before going into business for himself, Mr. Currus will take a vacation in Florida. Mr. Riley was for many years deputy clerk of the United States Court.

The cancellation of the existing rates of 10½ cents and 11½ cents per 100 pounds on grain to Louisville and Cincinnati from St. Louis will become effective on January 17. The cancellation was suspended until that time by the Interstate Commerce Commission.

A delegation from the Cincinnati Grain and Hay Exchange will attend the meeting of the Indiana Grain Dealers Association at the Palm Room, Claypool Hotel, Indianapolis, on January 20 and 21. Several local unattached grain dealers are also planning to attend. Several local millers will also leave here in the near future to attend the meeting of the Indiana Millers Association on January 14 at Indianapolis.

D. J. Schuh, for the last seven years secretary of the Cincinnati Grain and Hay Exchange, has resigned. Mr. Schuh has taken a position with the Early & Daniel Grain Company. The resignation was accepted.



D. J. SCHUH

and took effect January 15. Before becoming secretary of the Grain and Hay Exchange, Mr. Schuh was secretary of the Subsidiary Department of the Chamber of Commerce. He left the Chamber of Commerce in March, 1913.

B. J. Drummond, transportation manager of the Exchange, has been appointed executive secretary and manager of the transportation department to succeed Mr. Schuh. This appointment was made to be effective during the life of the present Board of Directors. Mr. Drummond will be given an assistant so that his duties in the transportation department will not be materially interfered with. The new Board of Directors, which will convene on January 25, will receive recommendations from Mr. Drummond for the appointment of an assistant.

In an effort to increase production, especially in grain, in this vicinity, the B. & O. R. R. has adopted a unique plan to aid the farmers. Small tracts on or adjoining the rights of way will be leased the farmers for nominal sums. The company's industrial agent in this territory is arranging the rentals for the tracts of land.

G. E. Beucler, formerly of Stryker, Ohio, who successfully established himself in the local hay business here about a year ago, has returned from a two weeks' trip among his hay shipping friends of central Ohio.

At the regular January meeting of the Board of Directors of the Cincinnati Grain and Hay Exchange, F. L. Watkins, representing the Cleveland Grain and Milling Company, and Daniel J. Kallaher, representing the Joseph F. Costello Grain & Hay Company,

were granted one share of the capital stock of the Exchange, so as to make them eligible for membership.

The Directors so amended the rules relating to deliveries as to conform with those of the Grain Dealers National Association which in effect, causes a contract for delivery of grain to be in effect even though the time of delivery may have expired; that is to say, when the seller fails to notify the buyer of his inability to fill the contract, the obligation of the seller continues until certain provisions of the rules have been complied with.

E. E. Danneman, flour broker, is on an extended western pleasure trip of two months. He will visit a brother in Seattle, Wash., the Grand Canyon and the leading cities on the Western Coast.

W. L. Ingles, local Federal grain inspector, has gone to Cumberland, Md., for an indefinite period to visit his family.

Harry Niemeyer for many years hay department manager of the Fitzgerald Bros. Company has resigned that position and entered the hay and grain business for himself. Mr. Niemeyer is seeking quarters in a down-town office building, near the Hay and Grain Exchange. He expects to be ready for active business on February 1.

J. J. Carter, vice-president of the D. O. Cross Company, has been elected to the membership of the Cincinnati Rotary Club.

An embargo on hay shipments to Cincinnati ordered by all railroads entering the city last month was lifted early this month, after a clearance of more than 300 cars. Prices during the interval were steady to firm for all cars of good quality.

Thirty traffic managers of Ohio industrial and commercial concerns attended the quarterly meeting of the Cincinnati Industrial Traffic League at the Hotel Sinton last month and discussed problems of interstate transportation.

The Dewine Milling Company, which operates a mill at Oldtown, Ohio, and a branch retail store at Yellow Springs, is preparing to open a main office in the Messenger Building, Hamilton, Ohio, which will be in charge of John Dewine.

## KANSAS CITY

B. S. BROWN - CORRESPONDENT

**R**ECEIPTS of grain at Kansas City in 1920 amounted to more than 100,000,000 bushels, 5,000,000 less than in the year before and only a few thousand less than in 1918. The total has been exceeded only four times and is 15,250,000 bushels under the high record made in 1916, but is nearly 16,000,000 bushels more than the average for the past 10 years. The more important grains, wheat, corn and oats, showed substantial decreases, compared with 1919, while Kaffir, rye and barley each established a new high record.

Transportation facilities in the Southwest were inadequate for the requirements of grain shippers during most of the season, which doubtless was a factor in restricting the movement of wheat to Kansas City. Had cars been available when wanted and in the quantity desired grain arrivals, particularly wheat, might have made a new high record. Unusually large amounts of wheat have been shipped direct from country loading points to ports for export account, which also has been a factor in restricting the movement to terminal markets.

Kansas City receipts of grain, in bushels, last year and in 1919 are here shown:

	1920	1919
Wheat .....	70,738,650	72,137,250
Corn .....	11,531,260	15,801,250
Oats .....	7,803,050	12,503,500
Kaffir .....	6,690,200	2,150,500
Barley .....	2,625,000	2,140,000
Rye .....	966,900	612,700
Totals .....	100,355,050	105,345,700

Total deliveries on December contracts at Kansas City were 414,000 bushels of wheat, 196,000 bushels of corn and 95,000 bushels of oats. A large part of the wheat was received by exporters and was shipped to the Gulf. A local mill also received a moderate quantity.

Export trade in wheat has been active at Kansas City the past few weeks. The British, French and Belgians have been the main buyers and in addition a dozen smaller countries have taken moderate quantities. At one time Austria was in the market, for the first time this season. The bulk of the local trade was via the gulf, though as a rule premiums at the Atlantic Seaboard were firm. Only a small part of the orders was filled on the open carlot market, the bulk being purchased in the country for delivery at a



gulf port. The fact that foreign demand extended through the holiday season was somewhat of a surprise as most of the European buyers are in the habit of taking a prolonged holiday at the end of the year. It was also thought that foreign buying would diminish as soon as the Argentine crop was assured, but favorable crop advices from Argentina did not affect buying here. The fact that export taxes have yet to be adjusted in the South American country partly explains the absence of foreign buyers from that market. Purchases at Kansas City were generally for January and February loading though inquiry extended to April.

A good export demand for corn was reported on several occasions but no actual sales were confirmed.

Fire starting from a tanker in the harbor damaged the conveyor of the Sunset Elevator at Galveston recently. The plant was out of commission about a week, according to advices received by the Kansas City Office of the Terminal Elevators.

The authorship of the Capper Bill, which imposes a tax on certain speculative future transactions, is credited to the attorney of the Kansas Grain Dealers Association, a leading Kansas miller and a grain dealer, according to circular letters favoring the measure sent out recently by Kansas firms.

Charles W. Lonsdale, president of the Simonds-Shields-Lonsdale Grain Company, is on the committee with Leslie Gates of Chicago and Fred Wells of Minneapolis which has charge in a general way of whatever action the grain exchanges are to take in regard to the numerous bills now under consideration which affect the grain trade. There have been several meetings of the committee but nothing definite has been done, according to reports.

The car situation in the Southwest continues fairly favorable, as reflected by liberal receipts and absence of complaints either at country points or at terminal markets. While definite figures are not available, most shippers are willing to admit that the supply of cars at present is the most satisfactory in several years and is in sharp contrast with the acute shortage that existed the first part of last year.

Only a few grain firms gave Christmas bonuses this year and those that gave out checks were able to give only small amounts as a rule. The change in policy was generally attributed to the recent severe break in prices and the generally dull condition of business, all of which tended to restrict profits. Employees of private wire houses generally received larger presents than other grain forces.

A moderate revival of pre-war custom occurred at the Board of Trade the day before New Year's. Tin pans were pounded, cigars and apples were served frequently and there was a general carnival spirit. Before the war the final session of the year was the scene of a big flour and grain fight and of wild noise.

Reports on the condition of winter wheat in the Southwest are uniformly favorable, with the outlook generally described as a little above the average. There is practically no snow covering, but there have been only a few cold waves of short duration, none of which was followed by any reports of damage.

The Board of Trade transportation office recently received notice that the National Railways of Mexico have been admitted to full membership in the American Railway Association, according to which American owned equipment will be allowed to move under original load to destinations in old Mexico on the National Railways of Mexico, instead of being transferred into Mexican equipment at the border, as has been the practice for many years. Kansas City dealers ship a good deal of grain to Mexico and the ruling may result in an improved demand.

Orion Vergil Dodge, widely known in many industries as "O. V. Dodge," was shot and killed, presumably by a burglar, after midnight, at his home in Kansas City, Mo. Mr. Dodge, who lives with his daughter, had attended a convention of an insurance company of which he is a director, returning shortly before midnight. His body was found Saturday morning, January 8, in the driveway leading to the garage, beside the body a revolver, one cartridge discharged; and several feet away, his own revolver, no cartridges discharged. Mr. Dodge was 61 years old. He was born in Adel, Ind., but spent his early business life as a hardware and implement dealer at Great Bend, Kan. He came to Kansas City in 1889, buying an interest in the Kansas City Hay Press Company, and served as an officer of that company. He later entered the grain trade, his firm being the Moses-Dodge Grain Company. He acquired much of his wealth through the successful operation of the Lucky Tiger Mining Company, which he had helped to reorganize. He was one of the organizers, and a director of two insurance companies, The Midland Life, and the Business Men's Assurance Company of America, both Kansas City companies, and very successful. He had always been a prominent figure in civic activities; was president of the Manufacturers

Association in 1902, and president of the Chamber of Commerce in 1906, and assisted in instituting and forwarding many enterprises, among them the project for navigating the Missouri River. Mrs. Dodge died several years ago.

Seedsman in this territory report that an unusual acreage of wheat will be sown in clover this spring, the clover to be plowed under this fall after wheat harvest, as fertilizer. The stocks of field seeds does not seem to have come into the winter as voluminous as had been feared in the fall. However, it is expected that there will be a much greater traffic in seeds among farmers than ever before. The stocks of domestic alfalfa are said to be about normal, although there was a large carryover of imported alfalfa. In January, growers are still holding seed at stiff prices, compared with the market as indicated in offers from handlers in other sections. Some seedsman are offering grasses and hays at very low prices, from stocks bought in the fall, and the tendency seems to be upward generally.

Ben L. Hargis will head the Kansas City Board of Trade this year. He was elected without opposition at the annual election, the other candidates having withdrawn in his favor. The new president was first vice-president last year and served as president much of the time due to the illness and absence from the city of Fred C. Vincent. Mr. Hargis has held several other offices and for several years has been identified as one of the more active of the younger members. He is 39 years old.

Mr. Hargis is the second member of his family to direct the activities of the grain exchange. His father Ben F. Hargis was president in 1901 and today, though



BEN L. HARGIS

advanced in years, is still an active member of the Board. This is the second time father and son have held the office of president, the other case being that of John Moore and his son Ben C. Moore. Mr. Hargis was born at Belton, Mo., a small village near Kansas City and has lived at one or the other places all his life. He has been associated with his father in the B. F. Hargis Grain Company since 1898. Both have several banking and farming interests.

Fred C. Vincent, the retiring president, is vice-president of the Simonds-Shields-Lonsdale Grain Company.

The office of first vice-president will be held by James N. Russell of the Russell Grain Company, who advanced from the position of second vice-president, as provided in the rules of the exchange. Harry J. Smith, manager of the Federal Grain Company, and formerly with the Grain Corporation, was elected second vice-president.

The following directors were chosen: E. O. Bragg, broker, representing Farnum, Winter & Co.; Fred B. Godfrey of the Simonds-Shields-Lonsdale Grain Company; Fred C. Hoose of the Norris Grain Company; W. B. Lathrop of the Pierson-Lathrop Grain Company; W. J. Mensendieck of the Mensendieck Grain Company; and Harold F. Spencer, broker. The Arbitration Committee will consist of Fred Bedell, R. A. Jeanerett, J. J. Kraettli, Fred Lake and W. H. Marshall.

Julius Barnes, head of the United States Grain Corporation during the war and the succeeding period of Government control of wheat marketing, and De Forest Piazzek, who was in charge of the Kansas City office of the Grain Corporation, have organized a company to engage in the general grain business in Kansas City. The company will give special attention to export trade via the gulf ports.

Details of the organization have not been completed

yet, but the company expects to start operations in the near future. Mr. Piazzek will be in charge of the Kansas City office. Among his force will be P. P. Allen, associated with him for several years in the Grain Corporation.

Mr. Barnes was head of one of the largest grain exporting companies in the country when he gave up his business to serve the Government in the unprecedented experiment of controlling the wheat and flour markets. He has resumed his export business at Duluth and also has several foreign offices, including one at London.

De F. Piazzek has been a member of the Kansas City Board of Trade for many years and at the time he joined the grain corporation force he was president of the Kemper Grain Company.

The firm probably will be known as the Barnes-Piazzek Company.

## DULUTH

S. J. SCHULTE - CORRESPONDENT

DULUTH grain and elevator men were interested in the recent announcement that Julius H. Barnes, Ward Ames and associates, and M. L. Jenks and Charles T. Mears, had purchased from the Nye, Schneider, Fowler Company of Fremont, Neb., a controlling stock interest in the Itasca Elevator Company here. It is understood that the present organization of the elevator company will be continued, with Mr. Jenks as manager. The Itasca elevator plant at Superior was one of a chain of elevators operated by the Fremont company. No new construction or extensions at the plant are under contemplation at present, according to announcement by Mr. Barnes. The company however owns a site at Superior bought a few years ago that would be available for improvement at any time should it be decided to build a new elevator. The elevator now operated by the company is under lease from the Omaha railroad.

H. F. Salyards was practically elected president and G. H. Spencer, vice-president of the Duluth Board of Trade for the ensuing year by acclamation at a recent caucus of the members. Other nominations were made as follows: Board of Directors—Percy H. Ginder, W. B. Joyce and E. S. Ferguson; Board of Arbitration—George Barnum, Sr., W. W. Bradbury, and E. S. Ferguson; Board of Appeals, Thomas Gibson, F. E. Lindahl and W. J. McCabe. The retiring president, B. Stockman, had held office for two years. The annual elections will be held on January 18.

At the annual meeting of the Duluth Board of Trade Clearing House Association the following directors were elected: W. J. McCabe and M. L. Jenks for one year; E. N. Bradley and H. F. Salyards for two years and G. H. Spencer, G. G. Barnum, Sr., and J. W. Galvin for three years. George E. Foster was re-appointed manager of the Association.

Watson S. Moore, of the Moore Grain Company, spent the vacation season in Duluth after having been the greater part of the year in New York where he is devoting his attention to export trade. He expressed the view that the holding back of grain by American farmers last fall perhaps had the effect of preventing the breaks in prices extending any further than they did. Had the marketing of grain in this country been heavier, he considered it would have been reasonable to assume that lower quotations would have been brought about through competition with Canadian wheat for shipment to the American markets.

Duluth grain men with connections at Winnipeg have been interested in reports from up there regarding the success attained in experiments with a new variety of wheat known as "O. 10." It has been shown to have been grown with success at the Sixty-third parallel of latitude, which is farther north than wheat was ever before raised. The new variety was discovered by the Husbandry Department of the Manitoba Agricultural College. It is said to be a cross breed of Manitoba and Australian wheat, and to be harder than other grades.

Julius H. Barnes was a visitor on the Duluth market during the first two weeks of the year on a visit from New York where he is now making his headquarters. In his opinion the passing of the emergency tariff bill imposing an almost prohibitive duty on wheat would be a mistake, as for one thing it would tend to disturb trade relations between this country and Canada, while it seemed to him questionable as to whether it would be of any advantage to the American wheat grower. He considered that it would have been good policy for the House at Washington to consult the Tariff Commission and not rush legislation through that was not fully considered from all viewpoints. He was quite ready to concede that this country has still a substantial ton-



nage of wheat and other grains for export, but from statistics compiled in authoritative quarters, he estimated that the European countries would be in the market for all the grain of the last crop American farmers have to dispose of. Mr. Barnes declined to express any opinion regarding the future course of prices.

A feature in the trade here during the last month was the steady run of Canadian Spring wheat to the local elevators. The great bulk of that grain has been promptly reshipped to Minneapolis millers, but the Duluth mills have been buying it freely for mixing purposes. The movement has been averaging up to 35 to 50 cars daily for some time. Great Northern Elevator "S" and the Globe Elevator Company have handled all but a small proportion of the shipments. Duluth millers are greatly opposed to the placing of as high a duty as 30 cents a bushel against imports of Canadian wheat. Said E. Laird Goodman, manager of the Duluth Universal Milling Company: "The imposition of such a duty would mean that spot premiums on wheat would be advanced. On account of the light weight of American Spring wheat of the last crop, we need to use a proportion of the heavier Canadian Spring for mixing. The price of flour would be advanced in a corresponding ratio to the duty and the consumer would have to pay it."

Railroad freight rates on hay feeds and other cheap and bulky commodities must be reduced or the dairying and kindred industries in the Northwest will be affected, in the opinion of R. M. White of the White Grain Company. He pointed out that under the present freight rates the lower grades of hay and some lines of feeds cannot be profitably shipped any distance by growers, or handled by commission men. "Unless revision in rates is made the outcome would be that ultimately dairymen would be compelled to move their cattle and confine their operations to the hay producing districts, and following that sequence, condensed milk would ultimately take the place of fresh milk in many districts. That would be prejudicial to the health of infants and it would become a disturbing economic factor. This is a problem in which the elevator and grain commission men are interested, as well as hay and feed operators, and it should be given careful consideration."

Officers of the Duluth Board of Trade asserted in a recently issued statement that they desire to perpetuate the usefulness of the present trading facilities. They further assure the Board's membership as a whole that they are going to put the institution on a firm footing with the grain producers of the country, and will act without fear or favor to any faction or any element operating within the markets. They assert that they desire the grain producers of the Northwest to know that the Duluth Board is in order, and that they seek to restore confidence in the grain exchanges, for which producers and their co-operative elevators have so much use.

Along that line of accomplishment the Board of Trade here sent its president, Benjamin Stockman, and the president of the Duluth Board of Trade Clearing House association, W. J. McCabe, to attend the meeting between the producers and grain dealers at Bozeman, Mont., where an open forum was held. At this meeting and forum the Duluth men hope to bring about a better understanding between the grain exchanges and the producers.

An aggregate of 74,365,650 bushels of all grains were received at Duluth elevators during the calendar year 1920 as compared with 49,929,106 bushels during 1919. Of that domestic wheat receipts accounted for 41,888,527 bushels, against only 21,354,074 bushels in the previous year. The movement of barley for the year reached good proportions at 19,959,589 bushels, against 16,596,656 bushels in 1919. While commission houses and the elevator interests on the Duluth market were disappointed that their hopes of a heavy run of grain this way last fall were not realized, taking the tonnage of crops into consideration, they are gratified that the amount marketed here reached the aggregate it did. A larger run than usual from the country is expected to develop next spring, as it is thought growers over the Northwest will be more ready by then to market their remaining grain supplies.

Were it not for trading in rye and Durum, operators on the Duluth market would have had little to occupy their attention during the last month. Rye has formed the largest proportion of the current receipts for some time back. Operators on this market have been in receipt of export inquiry for that grain recently and some contracts have been put through for shipment at the opening of the navigation season. Stocks in the elevators have been accumulating slowly and they now aggregate approximately 325,000 bushels. The spot market in that grain is up 15 cents as compared with a month ago at \$1.59. The foreign demand continues to show strength.

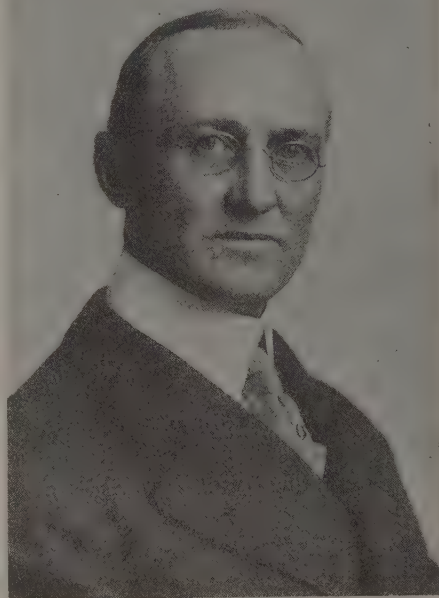
Only a few cars of Spring wheat have been straggling in here daily but Durum receipts have been bulking relatively well so that elevator stocks at present stand at 1,150,000 bushels. Eastern millers

have been contracting for Durum on this market for macaroni flour making purposes. With exporters out of the market for the time being, however the market in Durum is off, and it has been quoted lately at a discount of 4@5 cents under Spring wheat, whereas it commanded a premium at as high as 10 cents at one time last fall. The Barnes-Ames Company has been the most prominent operators in Durum during the present crop year, and since open trading was resumed on July 15 last.

Elevators with cleaning departments here have had a slow time since last fall on account of the average good quality of the grain marketed this season. Little smutty wheat has been showing up in the daily receipts. The elevator cleaning plants at Duluth had their harvest during the season of 1911-12, when several million bushels of Canadian wheat were handled here on account of congestion at the Canadian Head of the Lakes. A large portion of that grain was wet and it was found necessary to put it through the dryers at the elevators.

## ST. LOUIS C. M. BASKETT CORRESPONDENT

THE new president of the Merchants Exchange is Nat. L. Moffitt, of the Moffitt-Napier Grain Company, who was elected at the annual election held January 5. Mr. Moffitt is one of the old-time hustlers for the interests of the Exchange, as he has been active for the good of the organization ever since he went to work for Hubbard & Barlett, in



NAT. L. MOFFITT

1882. In 1900, after the death of Mr. Barlett, the name of the firm was changed to the Hubbard & Moffitt Commission Company, and later, after the death of Mr. Hubbard, to Moffitt-Napier Grain Company, with Mr. Moffitt as president. Mr. Moffitt has filled every official office in the Merchants Exchange, and also been honored by many other organizations. Mr. Moffitt is very optimistic in regard to the outlook for the grain business of St. Louis, and believes that the crisis has passed.

George F. Powell was chosen as first vice-president. He also is well known as a hustler, as he has been in the grain business in St. Louis since 1884, when he started in with Connor Brothers. He became a partner in that firm in 1894, where he continued to be active in the trade and in the affairs of the Merchants Exchange until 1910, when, with the late John J. O'Rourke, he organized the Powell & O'Rourke Grain Company, of which he is the head. In addition to operating the Brooklyn Street Elevator, the firm does a large business in corn for the Cuban and Mexican trade, in which the grain-drying facilities of that elevator are of great benefit.

William J. Edwards, the second vice-president, came to St. Louis about 20 years ago from Tennessee, and shortly afterward became associated with Bert S. Lang, in the cash grain business. On Mr. Lang's appointment on the United States Grain Corporation, he took over the business of Mr. Lang's firm, under the name of W. J. Edwards & Co., which he still conducts, specializing in buying of cash grain on commission only.

The election was a very tame affair, as there was

no opposition to any of the candidates. Practically all of the members felt that the ticket was so well balanced that it could not be improved upon. The completed ticket selected follows:

For director, the following were elected for two years: Charles L. Niemeier, Woodson K. Woods, Edwin T. Stanard, M. R. Parrott and Henry A. Diamant. The new Committee of Appeals will be: W. T. Brookings, J. H. Caldwell, Wilbur B. Christian, R. R. De Armond, Arden L. Gray, William E. Henry, Maxwell Kennedy, Joseph Leipman, B. J. McCauley, Herman Von Rump, Louis F. Schultz and P. S. Willson. On the Committee of Arbitration are A. E. Bernet, J. C. Burke, J. A. Connor, J. E. Dixon, J. T. Newell, Aderton Samuel, G. W. Seele, H. E. Theiss, W. H. Toberman and J. H. Watson.

The interest rate on purchases or consignments of grain, seeds, etc., has been placed at 7 per cent for the month of January, 1921, by the Merchants Exchange of St. Louis.

A. C. Carpenter, of the Bemis Bro. Bag Company, has applied for membership in the Exchange, to be transferred from H. H. Allen.

The following summary has just been issued regarding the farm and crop situation in Missouri: "Missouri's field, pasture, orchard and garden crops produced in 1920 total nearly \$400,000,000, according to the year-end announcements of Agricultural Statistician E. A. Logan, of the United States Department of Agriculture, and Secretary Jewel Mayes, of the State Board of Agriculture, who further say that the grade value of unsold live stock on farms is \$240,000,000, and miscellaneous farm products, including milk, eggs, poultry, wool, hides, furs, wood, and home-slaughtered animals, amount to \$288,274,400, a grand total of nearly \$1,000,000,000 of crops, farm products and live stock.

"The total acreage in all farm crops of Missouri in 1920 was 14,583,885 acres against 15,330,060 acres in 1919, a decrease of 746,175 acres. The Missouri area in corn, wheat and oats in 1920 totals 10,607,000 acres against 11,770,000 acres in 1919. The total production in bushels of these three crops in 1920 was 285,739,000 against 257,608,000 in 1919. The grade value of unsold live stock on farms shows a shrinkage of \$90,566,000 since January 1, 1920, in addition to the record-breaking reduction in selling values of practically every crop and product on the farm today.

"The State-Federal listing of the Missouri crops of 1920 is as follows, showing abundance of food and feed at sacrificing prices: Corn, 6,215,000 acres, 32 bushels per acre, 198,880,000 bushels, 68 cents per bushel, \$135,248,400; Winter wheat, 2,600,000 acres, 12.5 bushels per acre, 32,500,000 bushels, \$1.63 per bushel, \$52,975,000; Spring wheat, 17,000 acres, 13 bushels per acre, 221,000 bushels, \$1.63 per bushel, \$360,230; oats, 1,775,000 acres, 30.5 bushels per acre, 54,138,000 bushels, 49 cents per bushel, \$26,527,620; barley, 8,000 acres, 28 bushels per acre, 224,000 bushels, 75 cents per bushel, \$168,000."

A prominent St. Louis commission merchant makes the following review of the present grain situation here: "Those who expect the War Finance Corporation to have the effect of sustaining values of American cereals, no doubt are familiar with politics, but have erroneous impressions in regard to finances and the intricacies of commerce. The proposition means that we tax ourselves and put money in the treasury to be loaned to foreigners, who have no cash of their own to buy our products. That is, we sell our products to those who cannot pay cash to anyone else, and loan them our money to pay ourselves.

"The result of this necessarily will be that America will get all the credit customers and pile up a lot of foreign debts and big taxes, whereas Argentine and Australia would get the cash customers and be in good financial shape. How can such a situation prove profitable to America for any length of time? A temporary inflation might develop, but the results would be ultimately depressive. What is needed in Washington is some business men and some horse-sense."

There was an unsettled attitude of mind in speculative wheat here the last week in December due to some extent to the new low figures on cotton in Liverpool, a large bank failure in Sioux City, Iowa, small export purchases, a report from Great Britain that supplies were ample for immediate necessities, and a disposition among speculators to balance their trades as closely as possible for annual holiday income tax purposes. Belgium was reported as having bought 250,000 bushels of wheat, half of it of Canadian growth and the other half of the Western hard varieties. The movement to primary terminals was 880,000 bushels as compared with 1,189,000 bushels last season. Most of the terminals showed decreases except Duluth, which had about 100,000 bushels more than last season. Kansas City was expected to have large receipts this last week of December, but today there was only 193,000 there as compared to 381,000 last year, and Minneapolis had 310,000 as compared to 537,000 last season. In St. Louis, the local receipts were 42 cars, as compared with 49 last year, with some grain carried over from the past few days. The



and amounted to 42 cars, which was a fair clearance, and the basis of soft wheat was steady to two-cent decline. The demand was almost exclusively from outside mills, although a few local industries took a car here and there. There were unsupplied orders for western white varieties and a broader demand than there was choice red wheat here, but there was no buying or elevator buying in evidence.

The close on the March wheat in the various terminals on December 21 ranged from one cent here to two cents in Chicago, two and one-half cents in Kansas City and three cents in Minneapolis. Most of this decline was late after the cash sales had been made. There is a soft feeling to the market, which may be attributed to the fact that there was so little fresh export business done. The movement is now increasing and the needs for domestic use are just as large so that today's weakness may be considered as only a momentary one.

In corn, a better feeling was in evidence, because of some export business being done, which while small, indicates that Europe is beginning to become interested in our greatest cereal. Liverpool cables indicated a stronger tone there, with a disposition to buy American qualities. Argentine is still shipping freely, but the old crop there is almost exhausted and the demands hereafter will be more and more on the Western Hemisphere. The advance of from one-quarter to one-half a cent in the May crop was due to speculators cleaning up their trades and the market becoming well balanced, with no unwieldy interests on either side. Prices are stabilizing around existing figures, and the fluctuations within the coming fortnight should be moderate. It looks as if the market was getting back to pre-war or normal trading.

In the cash trade, the demand here was quite vigorous, with only 24 cars in the receipts and the total primary arrivals of 785,000, as compared with 1,141,600 last season. The range here was from one cent to three cents advance, with choice corn quite scarce. No. 4 Yellow was the best grade of Yellow on sale, and it brought 73 to 74 cents, as compared to 71½ to 73 cents in Chicago. The No. 2 White here brought 76 to 77 cents. Reports from Missouri and central Illinois indicate the quality of the corn to be very irregular and the amount in transit to this market quite small, so well sustained prices on good corn should be the outcome.

The oat futures ranged from one and a quarter cents on December to three-quarters of a cent higher on the May. This was due to the liquidation of December and transferring into May. Receipts at primary markets were 458,000 as against 543,000 last season. There was no special pressure, and the conditions remain the same as for the past week, with the market resisting pressure.

In cash oats, sales averaged a half cent advance, and the 20 cars here were absorbed so quickly that the market looked empty and idle. The No. 3 White sold at 49½ cents as against 48½ cents in Chicago. Farmers and country dealers do not show any disposition to press their oats on sale, and supplies are so low that normal replenishing operations should advance values here.

## PHILADELPHIA

T. A. SIEBER - CORRESPONDENT

ACCORDING to the monthly report of the statement of the Commercial Exchange, the stocks of grain in public warehouses in Philadelphia on January 3 were: 1,814,888 bushels wheat, 57,177 bushels corn and 296,055 bushels oats, compared with 1,896,984 bushels wheat, 40,783 bushels corn and 258,812 bushels oats in December 1, 1920, and 951,920 bushels wheat, 38,892 bushels corn and 163,083 bushels oats on January 2, 1920. Receipts of grain at Philadelphia during the month of December were: 4,096,776 bushels wheat, 92,699 bushels corn, 302,777 bushels oats and 117,868 bushels rye. Exports of grain from this port during the month of December were: 4,226,470 bushels wheat, 25,714 bushels corn, 2,000 bushels oats, and 233,793 bushels rye.

Montee A. Smith, grain broker, has moved his office to Room 460, The Bourse.

F. W. Johnson, agent for Arkell & Smiths, bag manufacturers, started on a business trip through central Pennsylvania last week.

Notice has been received by the Commercial Exchange from the Interstate Commerce Commission, under I. & S. Docket 1249, that National Star Insurance Co. is providing demurrage of \$2 per car per day for the first four days after free period, \$6 per car per day for the next three days and \$10 per car per day thereafter. In Supplement No. 4 to J. E. Fairbanks' Agent Tariff I. C. C. No. 8 to become effective December 1, 1920, have been suspended until March 21,

1921, unless otherwise ordered by the Commission, and no charge shall be made in such rates, charges, regulations and practices during the said period of suspension unless authorized by special permission of the Commission.

Wm. J. Rardon, secretary of the Philadelphia Flour Club, who has been confined to his home with an attack of pneumonia, is recovering rapidly and expects to be back at his office within the next week.

G. Percy Lemont, head of the firm of E. K. Lemont & Son, flour and feed brokers, left on Christmas Day for Pinehurst, N. C., where he will spend the balance of the winter.

Owing to an increase in business, George M. Richardson, grain broker, has moved his office to Rooms 464 and 466, The Bourse.

John O. Foering, former chief grain inspector of the Commercial Exchange, and wife, left for Dunedin, Fla., for the balance of the winter.

Henry G. Fell, formerly a prominent grain dealer of Doylestown, Pa., died on December 29 at Atlantic City, N. J.

Walter Zang is now connected with the Harper Grain Company of Pittsburgh, Pa., having formerly been the secretary and treasurer of the Mansfield Elevator Company.

H. G. Reed Company has been incorporated under the laws of New Jersey to deal in grain with a capital of \$100,000. The incorporators are G. S. Reed, H. G. Reed and John Black, all of Trenton, N. J.

The Morgan Grain Company, San Francisco, Calif., has obtained a charter under the laws of Delaware to deal in grain and agricultural products with a capital of \$300,000.

Charles J. Haigh, transportation solicitor, 114 Drexel Building, Philadelphia, and J. Tyson Heather, grain broker, Maryland, Md., were elected to membership in the Commercial Exchange at a recent meeting of the Board of Directors of that organization.

New memberships in the Commercial Exchange have been petitioned for during the past month by John H. Michael, flour broker, 385 Bourse, and the Wabash Railway Company, represented in this city by G. G. Easby, general agent, 825 Widener Building.

The Pennsylvania corn show will be held this year at Harrisburg, Pa., from January 24 to 28. Any state will be allowed to compete for the prizes to be awarded.

The number of cars unloaded during December at Girard Point Elevator was: 1,122 wheat, 1 oats and 5 rye; at Port Richmond Elevator, 1,753 wheat, 13 corn and 46 rye; at Twentieth Street Elevator, 12 corn, 87 oats, 2 buckwheat and 1 peas.

Embargo No. 4839 placed by the Philadelphia & Reading Railway Company on freight consigned to Pennsylvania Warehousing & Safe Deposit Company, Delaware Avenue Stores 1, 2 and 3, Sixteenth Street Stores and Port Richmond Stores, Philadelphia, Pa., has been entirely cancelled. Embargo No. 5273 placed by the Philadelphia & Reading Railway Company on all freight consigned to Commercial Warehouse Company, destined Philadelphia, has been entirely cancelled.

Pennsylvania Railroad embargo No. 13 is revised to allow feed and food for animal and human consumption to come forward consigned to New York, Brooklyn and Jersey City; also to Bush Terminal, New York Dock, Baltimore, Atlantic and Fulton Terminals and Brooklyn Eastern District Terminal, with the exception of hay. Pennsylvania Railroad embargo No. 133 covers all carload freight consigned simply "Philadelphia, Pa." when no specific delivery is shown.

Long Island Railroad embargo No. 1309, embargoes all shipments of hay consigned to all consignees for the following stations: Atkins Avenue, Bushwick, Bay Ridge, Evergreen, Elmhurst, East New York, Fresh Point, Flatbush Avenue, Jamaica, N. Y., Long Island City and Winfield.

Pennsylvania Railroad embargo No. 320, covering all carload freight for all consignees in care of Keystone Elevator & Warehouse Company, Merchants Warehouse Company (including Webb Terminal and River Front Stores) and Pennsylvania Warehouse & Safe Deposit Company, Philadelphia, also carload hay and straw for all stations in Philadelphia, has been cancelled, effective December 14, and freight may now come forward to any of the aforementioned warehouses without permit.

The following announcement was received by the Commercial Exchange from F. R. Yealland, commercial agent of the Pere Marquette Railway Company: "In announcing the removal of the Pere Marquette Railway's Philadelphia office to Room 575 Bourse, we would appreciate it, if you would bring to the attention of the members, the new service which we have

recently established. Two new daily symbol trains are now in operation, one from Chicago and one from Ludington (where connection is made by car ferry from Milwaukee and Manitowoc), to the Niagara frontier. Ample time has been allowed in these schedules to insure an 'on time' service of 67 hours from Chicago and 52 hours from Ludington. This office is in a position to quote rates, arrange for diversions and reconsignments, and furnish prompt information regarding shipment via its lines, daily reports of cars passing the various junctions being kept on file."

The Commercial Exchange appointed George G. Omerly, W. K. Woolmand and H. B. Holmes to attend the conference with the Interstate Commerce Commission on January 13, with reference to rate differential between the Gulf and North Atlantic ports.

J. T. Shallcross, a member of the Commercial Exchange, Middletown, Del., carried off most of the high honors at the state corn show recently held at Delaware College. He won the sweepstakes for the best 20 ears, the best 10 ears and the best single ear exhibited.

According to a recent report of the United States Bureau of Crop Estimates the area seeded this fall to winter wheat in Pennsylvania is estimated at 94 per cent of last year's acreage, or 1,462,000 acres, as compared with 1,431,000 acres, the average area seeded for the past 10 years. The condition of the crop on December 1 was 93 per cent of a normal, which is 6 per cent under the condition of last year, but the same as the 10-year average on December 1.

## NEW YORK

C. K. TRAFTON - CORRESPONDENT

INCORPORATED under the laws of the state of New York, James Carruthers & Co., Inc., will continue the grain business carried on for many years under the name of James Carruthers & Co., Ltd., which remains as the name of the parent concern in Montreal, Toronto and Winnipeg. The officers of the corporation are: James Carruthers, president; Charles W. Band, vice-president; and Charles S. Band, secretary and treasurer.

Joseph G. Gash, for many years vice-president and general sales manager of the American Cotton Oil Company, announced that he had severed that connection on the first of the year to become head of J. G. Gash Company, Inc., dealers in fats, oils, greases, and cottonseed products.

J. A. Ludlow of Macwatty & Flahive, grain merchants, has been elected to membership in the N. Y. Produce Exchange. G. Verbeet, associated with the Van Stolk's Commissiehandel, merchants of New York and Rotterdam, has also been elected to membership. James W. Merrill, flour distributor in this market, is an applicant for membership in the Produce Exchange.

Henry E. Beardsworth, for several years connected with various grain firms on the New York Produce Exchange, latterly with P. N. Gray & Co., has severed that connection and gone into the freight brokerage business on his own account.

Wilfrid F. Rosar, for several years associated with the New York Produce Exchange with the Melady Grain Company, has been admitted to partnership in that firm.

Charles V. Gaffney, for many years an active member of the grain, hay, and feed trade on the New York Produce Exchange, has announced that he will no longer act as buyer for the William Hall Company, local distributors.

Julius H. Barnes, formerly president of the United States Grain Corporation, but once again an active member of the grain trade, has been appointed a member of the Executive Committee of the Foreign Trade Financing Corporation.

The huge trading floor of the New York Produce Exchange did double service as a place for entertainment, ostensibly for the children, but actually for many adults as well, during the recent holiday season. On Christmas Eve the courtesies of the floor were extended to the members of the New York Stock Exchange for the purpose of conducting their annual entertainment and gift distribution to their employees and families. On the last day of the year occurred the customary Year-End Entertainment which is looked forward to so eagerly every year by thousands of poor children living on the lower part of Manhattan Island. As usual on this occasion, business was suspended at 1 o'clock, and the great crowd of little guests took possession of the long tiers of circus



seats built around the center of the room. A varied program was arranged for their amusement. There were acrobats, and Starret's circus, with performing animals and clowns that were so funny that a fellow couldn't help laughing at their antics. And there were 300 youngsters who had front row seats, because some of them were not able to stand up or to see over shoulders, as they were crippled and had to be conveyed to the Exchange in special cars. At the end of the show Santa Claus, represented by George W. Blanchard, presented each child with a basket containing a varied assortment of gifts.

## LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

**B**USINESS with the local elevators and grain men continues very light, and but for a little drying of corn there is very little being done by the elevator operators. It is reported that many of the elevators haven't made any money for months past, due to the light grain holdings. Even with the smallest number of men possible to operate the plants the costs are still too great to be taken care of by the small number of bushels carried.

The past year has been a slow one for the trade generally, the elevator operators not showing any profits to speak of, while the grain trade has been steadily on the wrong side of the market on purchases, and forced to take losses on grain before it was even delivered in their elevators or warehouses. Today farmers are only being offered about 70 cents for corn, and are not selling much, while there is no buying demand, and but little storage.

The Kentucky Public Elevator Company reported poor conditions. Even after cutting the force down to about 25 men, the least the concern can run with, and cutting operations to seven hours a day, costs are steadily greater than receipts.

Louisville flour mills have been averaging about four days a week or less, and haven't been really busy since the early part of the crop year. Several millers of this district report that they lost money during the first half of the crop year, but hope to make a better showing later on.

There is plenty of hay in the country this year, and good hay, but farmers are asking high prices for it, and consumers are refusing to pay them. Demand as a whole is not heavy. Shipments have been running light. Some river hay has been coming in rather freely, but at prices three to five dollars a ton lower than rail quotations. Principal quotations in car lots show No. 1 Timothy, at \$28 a ton; No. 2, \$27; Clover, No. 1, \$28; No. 2, \$25; Mixed, No. 1, \$26; No. 2, \$24. Wheat and oat straw, \$16.50; rye straw, \$17.50.

Jobbers are quoting corn at 82 cents for No. 2 Yellow, kiln dried; 81 for Mixed, and 82 for White, with No. 3 grade at three cents under. Oats are quoted at 54 cents for White No. 2; 53½ for No. 3 White; and 53 for No. 2 Mixed. Corn in natural state is running rather wet, and is almost all being dried before it is safe for the market. Drying cost is around 5 cents a bushel.

Feeds are much lower and millers have been forcing up their flour prices to take care of the decline in feeds. Today short patent flour is quoted at \$10.70 a barrel, cotton, carlots, Louisville; with long at \$9.50 and low grades, \$6.50. Feed is quoted at \$35@37 for bran; \$35@38 for mixed feed; \$36@39 for middlings; \$34@36 for hominy feed.

No consideration of a serious nature has been given here to the Capper bill for control of wheat and grain, which was introduced into Congress last month. Millers claim that it is an impossible bit of legislature.

A fight has been started in Louisville against methods of assessing seeds, grain and lines formerly assessed as raw materials or unmanufactured agricultural products, which the assessor this year has tried to classify as merchandise. This makes quite a difference in the tax rate.

At Lexington, Ky., the Fayette Coal, Grain & Feed Company has been enlarged, and the capital increased from \$10,000 to \$50,000. C. L. Ryley, one of the heads of the concern, is active in coal operations of eastern Kentucky, and recently organized the \$200,000 C. L. Ryley Coal Company.

A recent report on 1920 crops, prepared by the State and Federal experts, working in conjunction, shows that farmers grew 100,650,000 bushels of corn; 5,610,000 bushels of wheat; 1,508,000 tons of hay. There were increases in production of corn, oats, barley, potatoes, apples, peaches, pears, cowpeas, sweet potatoes, and decreased production of rye, wheat, tobacco and hay. It is reported that 625,000 acres of wheat land was planted in the fall of 1919 and 1920.

The condition of wheat on December 1, 1919, was 84 per cent; and 80 per cent for December 1, 1918. It is generally reported that the condition of wheat as of December 1, 1920, was fine.

## TOLEDO

C. O. BARNHOUSE - CORRESPONDENT

**T**HE prices of all grains have been fairly steady for several weeks. The wheat market being a world affair, the Toledo market has responded to that influence. The milling demand is beginning to come out of hiding with the increased demand for flour and feed, and if the increase in the production of flour keeps pace with expectations all arrivals of wheat will find ready buyers from this time forth.

The receipts of corn and oats, while lagging behind the records of some former years, are sufficient to take care of the demand. The prices of cash grains (January 7) are as follows: Wheat \$1.96, corn 75 cents, oats 51½ cents.

At the annual meeting of the Toledo Produce Exchange held January 3, the following officers were re-elected for the ensuing year: President, H. R. De Vore; vice-presidents, R. S. Sheldon and K. D. Keilholtz; secretary, A. Gassaway; treasurer, Geo. Woodman; directors, F. Mayer, D. Anderson, Frank King, F. O. Paddock, J. D. Hulburt, J. W. Young, F. R.



H. R. DE VORE

Moorman, F. W. Annin, C. S. Coup and R. P. Lipe. Arbitration Committee: J. A. Smith, L. A. Mennel, J. W. Luscombe, E. A. Nettleton, F. W. Jaeger, C. W. Mollett and Fred King. Committee on Appeals: John Wickenhiser, O. H. Paddock, R. L. Burge, G. J. Rudd, W. A. Boardman, J. C. Husted, W. E. Stone, J. A. Streicher, L. J. Schuster, G. R. Forrester and H. O. Barnhouse.

Several friends of Henry D. Raddatz, a prominent Toledo grain dealer who left on January 6 for a two months' trip to Florida and Cuba, gave him a complimentary dinner at the Toledo Club on the previous evening. The room was decorated with placards containing some of the slogans that have made Henry famous on the Toledo Produce Exchange during the last few months. The menu consisted of bear soup, bruin hash, short order steak, going down salad and short cake, in commemoration of his consistent stand on the short side of the market. He was the recipient of several valuable gifts. The party was conceived by Kent Keilholtz and A. J. Burkart and was attended by L. L. Winters and Jack Delaney of Chicago, John Husted, Jesse Young, John Luscombe, Harry Haskell, Ed Camp, Ben Hoffner, Lester Howard and Claude Griswold. They were unanimous in the prediction that sugar will go to 5 cents a pound before Henry is in Cuba long.

Fred Wickenhiser of John Wickenhiser & Co. returned Wednesday from a two weeks' holiday vacation spent with friends of Fort Wayne, Ind.

The receipts of corn for the year 1920 show an increase over 1919, but wheat, oats and rye show a material decrease, as will be seen by the figures which follow. Receipts for 1920 were: Wheat 5,034,375 bush-

els, corn 2,230,585, oats 4,796,610, rye 772,165, against 8,210,170 wheat, 1,430,500 corn, 5,465,368 oats, and 1,375,290 rye in 1919.

The price range for the year was as follows: Wheat, \$2.73 in July to \$1.86 in November; corn, \$2.08 in May to 75 cents in December; oats, \$1.26 in June to 51 cents in December; and rye from \$2.32 in June to \$1.40 in November.

L. L. Winters of Hulburt, Warren and Chandler, Chicago, was a visitor on Toledo Produce Exchange recently.

Jack Delaney of E. W. Wagner & Co., Chicago, called on Produce Exchange friends during the first week of the year.

Farmers from down state, who visit the Exchange, are unanimous in saying that the alternate freezing and thawing weather and we are experiencing this fall and winter are playing havoc with the growing wheat crop and if continued throughout the winter with a spell or two of zero weather will ring its death knell.

## MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

**D**ESPITE the contracted marketing of grain, and the evident disposition of farmers to hold back for higher prices, Milwaukee is maintaining an excellent record in corn marketing. A year ago at this time, Milwaukee was the fifth largest primary market for the receipts of corn on the new crop. Now the city easily ranks second for the largest corn receipts, being exceeded only by Chicago in this respect.

Chicago receipts of corn on the present crop, dating from November 1, have been a little over 10,000,000 bushels, while Milwaukee's receipts for the same period have been in excess of 3,250,000 bushels. Traders declare that Milwaukee is exceedingly popular as a corn market because this is such a large consumption center for corn with corn mills here using millions of bushels every year. This city is also reputed as a shipping point, so there is always an outlet for corn here. The market is never congested, grain men assert.

The January rate of interest on advances has been determined by the Finance Committee of the Chamber of Commerce at 8 per cent, the recent high rate.

One Milwaukee banker close to the grain trade says there is no appreciable liquidation of country bank loans due to farmers holding their grain and other crops for higher prices. Country bank loans are reported to be near the high point. "Despite the fact that grain prices have been going down and down, that there has been a greater loss by holding grain than by selling, farmers seem determined to stick to their stand," said this banker. "There is much grain back in the country and when this begins to come out in volume, it is likely to break the price still farther. And still the farmer hangs on. This attitude is incomprehensible to me because it is so futile."

Jesse Hoyt Smith, grain elevator operator and financier, well known to Milwaukee grain men generally, died at his winter home in Pasadena, Calif. Mr. Smith died from a stroke suffered while he was playing golf. Mr. Smith was the son of Angus Smith who came to Milwaukee in the early days and contributed very largely to the upbuilding of the city. He owned and operated grain elevators and had large railroad interests, all of which were successfully carried on later by his son.

Jesse Hoyt Smith was born in 1868 in Milwaukee and received his education in the public schools here and graduated from what is now the Milwaukee University School. He was a leader in sports and society and a heavy contributor to a large number of charitable enterprises. His widow survives him.

Charles B. Nehring has been elected to membership in the Chamber of Commerce by transfer of the membership of A. W. Frieze. Kneiser Bros., retail dealers in flour and feed, at 711 Kinnickinnic Ave., have also been chosen to membership.

Grain in store in Milwaukee at the opening of the new year was of small volume with 43,000 bushels of wheat, 374,000 bushels of corn in round numbers, 891,000 bushels of oats approximately, 136,000 bushels of barley and about 43,000 bushels of rye. Only in corn and oats are their holdings of any size at the present time, and even these are small by comparison with the normal.

Another old-time grain man who has just passed on was James L. Foley, aged 77. He was a son of Milwaukee's first Irish immigrant, John Foley, who came to Wisconsin in 1835. He was born in the same house in which he died in Wauwatosa. He held the



office of county treasurer for a time. James L. Foley enlisted in the Chamber of Commerce company in 1862. It was known as the 24th Volunteer Infantry and served in it until the close of the Civil War. Mr. Foley fought in the battles of Shiloh, Chickamauga, Missionary Ridge and all the battles of the Atlanta campaign. After the war Mr. Foley went to the University of Michigan where he graduated with honors. In 1876 he married Miss Elizabeth Hyland. He is survived by his widow, two sons and six daughters.

A comparison of the latest price record with that of a year ago indicates the drastic declines for most of the grains, with the exception of rye. Barley prices have been ruling at 88 to 90 cents for the No. 3 compared with \$1.56 to \$1.57 for the same period a year ago. The market has almost been cut in half. No. 3 White oats has been selling around 46½ cents as compared with 82 to 85 cents a year ago. Oats prices have almost been halved also, judging from these figures. Rye has held around \$1.56 to \$1.60 as compared with \$1.79 to \$1.80 for the same grade a year ago. Rye is therefore only about 20 cents a bushel less than a year ago, or about 12 per cent under last year's prices. No. 3 Yellow corn has been selling around 69 to 70 cents as compared to \$1.37 to \$1.38 for the corresponding time a year ago. Corn is therefore very close to one-half of the price of last year. No. 1 Northern wheat has ruled around \$1.75 to \$1.80 a bushel compared with \$3.15 to \$3.25 a year ago. Wheat also is very close to 50 per cent of the selling price of a year ago.

Practically all grains have been almost halved in price with the exception of rye. Rye has been in excellent demand at the Milwaukee market, in part to fill large export orders. All receipts have readily been absorbed for local consumption, or for shippers. Wisconsin rye has been in especial demand. The movement, however, has been of very moderate proportions.

Wisconsin farmers have cut down to some extent on their fall sown grains with 56,000 acres less than was planted a year ago. The total acreage of rye and wheat is 521,000 acres, compared with 577,000 acres in 1919. Dry weather in the early fall made planting uncertain, but rains in the later fall gave the grain an excellent growth and the fields entered the winter in fine condition. The mild weather so far has made it easy for the fall grown grain to survive. The area planted to winter wheat is fixed at 86,000 acres as compared with 94,000 a year ago and 96,000 acres as the five-year average. Since the average harvested for five years has been only 82,000 acres and with the prospects of little or no winter killing, more wheat may be harvested than usual. The condition of winter wheat is given at 91 per cent of normal as compared with 95 per cent a year ago and a 10-year average of 94 per cent.

The rye acreage of Wisconsin has also been cut down a little with 435,000 acres, compared with 483,000 acres harvested in 1920, and a five-year average of 438,000 acres. The condition of the crop is given at 94 per cent, compared with 95 per cent a year ago and a 10-year average of 95 per cent. The figures also indicate that rye is about five times as important a crop in the state as wheat.

Despite the talk of farmers having lost the value of their crops very largely in the recent price decline, statistics compiled by Government authorities for the state indicate that the crops of the state were worth \$323,000,000 in round numbers, or just 19 per cent less than the values a year ago, and 15 per cent lower than in 1918. These figures would suggest that the farmers of the state have lost about one-fifth of their buying power. The crops of 1920 were found to be worth 147 per cent more than in 1909.

The area planted in corn last year in Wisconsin made a high record, close to 2,000,000 acres and the crop was about 86,000,000 bushels. The yield was very high—in excess of 43 bushels an acre, although it was a little under the crop of 47 bushels an acre in 1919, but it was far above the 35-bushel average for the last 10 years. The figures indicate that Wisconsin has had an excellent corn crop for the last two years. The slump in corn has cut the value of this crop from \$108,000,000 in 1919 to \$66,000,000 for 1920. Since this computation was made, corn has dropped still farther as it was based on 77 cents corn on the farm, whereas corn brings scarcely 70 cents for the best in the city markets at the present time.

Barley is apparently going out of vogue to some extent in Wisconsin with a crop last year of about 15,000,000 bushels, compared with 25,000,000 bushels in 1918.

Oats yield in the state with 107,000,000 bushels compares with 78,000,000 bushels a year ago. The yield averaged over 44 bushels to the acre, as compared with a 10-year average of about 36 bushels.

Plans are being made in Milwaukee through Senator Lenroot to have an aggressive campaign in Congress to do whatever can be done to promote the Great Lakes deep water route to the Atlantic Ocean.

Congressman A. P. Nelson in the lower house will lead the fight there and Senator Lenroot will lead in the upper house. Information obtained in Milwaukee indicates that the Joint Water Way High Commission which has been investigating the St. Lawrence route for months, will report in favor of it. The next move will be the fight for appropriations, or for sanction of the project in the houses of Congress. It is believed certain that New York and allied interests will put up a stiff fight against the scheme, but the Middle West will be prepared to fight to the last ditch. Mr. Nelson points out that the great surplus production of the United States is in the Middle West and that the St. Lawrence route will provide a cheap outlet for this surplus to the markets of the world.

A remarkable situation exists in the Milwaukee barley market with Wisconsin grain at a high premium over that of other states, due entirely to the fine yield in this state and to the largely damaged or off quality in other states. A variation of 20 cents a bushel often measures this deterioration in quality. High prices are being paid for all barley in the Milwaukee market, the dealers declare.

Milwaukee flour stocks have increased to some extent with some 37,000 barrels in round numbers at the opening of the year, compared to approximately 18,000 barrels a month ago, 19,000 barrels a year ago and 14,000 barrels two years ago. Flour stocks at this time are at the highest for a series of years.

A check up on receipts of grain in Milwaukee for the first week of 1921 shows a much greater volume of business than had been expected. Total receipts for the week were 734 carloads, 795 cars the week before, 893 cars a year ago and 795 cars two years ago, indicating that the volume of offerings for that week were not very far from normal. Receipts for the first week of 1921 were composed of 142 cars of barley, 366 cars of corn, 153 cars of oats, 15 cars of wheat, 55 cars of rye and three cars of flax.

The Association of Commerce plans to push the Kellogg Act at the present session and the next session of Congress. The Kellogg Act would give railroads the right to own and operate boat lines on the Great Lakes, a reform which Milwaukee business men favor to a large extent. Business men of Milwaukee often declare that the lake traffic has been largely demoralized since the Panama Act went into effect, when many of the great fleets were swept off the Great Lakes.

A hot fight has been waged in Milwaukee over the location of the new \$5,000,000 warehouse and terminal for the new Milwaukee-Muskegon car ferry line. The Association of Commerce had chosen the Petit Salt Company site despite the opposition of the Milwaukee Chapter of the American Association of Engineers which is in favor of a site at the head of Kinnickinnic Bay. A meeting will be held early in January to complete the organization and finance the project, according to officials of the Association of Commerce.

## ILLINOIS FARMERS ELEVATORS TO MEET

The Farmers Grain Dealers Association of Illinois will meet at Champaign on February 8-10. The first session on Tuesday afternoon will be devoted to the formal opening and reports. The Champaign Chamber of Commerce will give an entertainment that night. On Wednesday a great number of practical subjects will be discussed, and on Thursday the election of officers will be held.

## JOIN NOW

W. E. Culbertson, secretary of the Illinois Grain Dealers Association, Delavan, Ill., has just issued the Twenty-Eighth Annual Directory of the grain dealers of Illinois. One of the features of the directory which adds to its convenience is a Shipper Index and Receiver Index, and its information about the Illinois Grain Dealers Association is full and complete. The secretary will welcome the receipt of applications for membership from any reputable Illinois dealer not now a member. It only costs \$12 a year and pays back in service many times that amount. Illinois should have no slacker dealers. All should be members of their state organization. Get and sign an application.

## FARMERS GRAIN DEALERS OF SOUTH DAKOTA

The South Dakota Farmers Grain Dealers Association closed an interesting three-day meeting on December 17. John T. Belk of Henry was reelected president and J. D. Hicks of Canton, A. L. Berg of Baltic, and J. C. Lehman of Betts were elected directors.

Among the speakers who took part in the program were W. H. Roth of Minneapolis, Charles Latchow of Ohio, who sent a paper to be read, Clifford Thorn and Owen L. Coon of Chicago and J. W. Shorthill and E. P. Hubbard of Nebraska. A permanent Suggestion Committee was named, consisting of Chris Sanvig, Canton; W. E. Carpenter,

Huron; F. A. Peterson, Stickney; W. E. Brewster, Woonsocket, and H. A. Campbell, Selby.

Resolutions were passed endorsing the actions taken by the Farmers National Grain Dealers Association; approving the Great Lakes-St. Lawrence Waterway; calling for an amendment to the Transportation Act, eliminating 6 per cent guarantee of earnings; requesting organization of a grain commission company and a collective purchasing association; calling for changes in the binder twine department of the state penitentiary; asking for a state law to provide for the use of county funds by co-operation societies; ask for exemption from the law requiring license to sell stock.

## MEETING OF INDIANA DEALERS

The Indiana Grain Dealers Association will hold its annual convention at the Palm Room in the Claypool Hotel, Indianapolis, on January 20 and 21, beginning at 1:30 p.m. on Thursday.

The Claypool Hotel will be the convention headquarters and those who desire reservations should communicate with the management of the hotel at once as we are advised the hotel is liable to be occupied by other conventions about the same time.

A profitable and interesting program has been prepared and the attendance is expected to be unusually large. The subject of future trading will have a place on the program.

## SOME POINTERS ON CLAIM COLLECTIONS

BY OWEN L. COON

(Concluded from Page 499, December issue)

Now a word as to your shortage claims. The Interstate Commerce Commission, in Docket 9009, has laid down a number of rules on weighing grain. If these rules are complied with you cannot help but make money and secure fuller payment of your claims. The Commission has disapproved wagon scales for the purpose of obtaining loading weights of grain. They have approved only hopper, automatic and track scales. The compensating lever on automatic scales must be set four times in weighing a car of grain. Your scales must weigh correctly within a tolerance of only one half a pound per thousand pounds.

Whether a grain claim is good in whole or in part, depends on simply one thing—the accuracy of your loading and unloading weight. When you get right down to "brass tacks," it is an entirely immaterial matter whether the car had a defective record or an apparently clear record. When a railroad issues a bill of lading for a car of grain, it becomes an insurer for its safe carriage. In fact, just as much so as if you took out insurance against loss with an insurance company. If they receive 66,000 pounds of grain, they are liable for every single pound of it that you can prove has been lost—and if you can prove that it was lost, it doesn't make a bit of difference whether the car had a clear record or a bad record.

But the burden of proving that grain was lost is upon you. Sometimes with even differences in weight you will find it a hard thing to prove. You should realize that "Official" disinterested weights at terminal markets are obtained at only six terminals in the United States. At all other markets the buyer or the owner of the elevator has one of his workmen weigh up the grain. This employee is also a deputy weighmaster of the Board of Trade. The weight certificate which you receive says that it is an "official" weight, but it is nothing more than a buyer's weight made up by his employee. Its correctness depends entirely upon the buyer. Most of such weights are correct, but at several of the smaller markets there is enough suspicion of incorrect weights at usually one certain elevator to cause me to say that in some cases, you may be out the grain and the railroad not have lost it.

If your loading and outturn weights vary more than 500 pounds as a regular thing you can be sure that something is wrong. If the car report shows a leak, the railroad probably lost the grain. If the car went to a market without a disinterested weighing department, the terminal weight may be incorrect. But if the car goes to one of the six larger terminal markets, and you have variations in weight of more than 500 pounds, and clear record car reports as a regular thing on car after car, you can know that your loading weight is off. Then, call a scale inspector. It may be that your scale is in good working condition, but you are unable to apply the human element to which it is necessary to make it run correctly.

Let me make this further suggestion. Don't be afraid to start suits. It is the only good weapon you have to get your rights. A declination of a good claim by a freight claim department is a common occurrence, but a refusal to settle a good claim by a legal department is the uncommon thing. The freight claim department never applies the law as it is. They are only the buffer of the legal department. If you have a good claim and it is declined, sue upon it and you'll get a real decision upon it from the legal department. If they don't play square with you the courts will. Join enough of your declined claims together in one suit to make the thing worth while.





## EASTERN

A grain elevator is being erected at Middlefield, Conn., for the Middlefield Grain & Coal Company.

The grain elevator of the Sykesville Milling Company of Sykesville, Md., which burned with a loss of \$160,000, is to be rebuilt.

To handle grain, flour and food products, V. Maini & Co., Inc., have been incorporated at Boston, Mass. The company is capitalized at \$50,000.

To handle grain, coal, lumber, feed, etc., the New Windsor Farmers Exchange Company has been incorporated at New Windsor, Md. The capital stock of the firm is \$20,000.

The State Co-operative Milling & Transit Association has been organized at Hartford, Conn., and is planning to purchase the plant of the Garber Northam Grain Company.

A 50,000-bushel elevator, warehouse and mill have been completed at Baldwinville, N. Y., for the Frazee Milling Company. The plant is of concrete and is electrically driven.

S. Scott Estey is president and Harry S. Jones, treasurer, of the Hancock County Farm Union Grain & Supply Company of Ellsworth, Maine. The capital stock of the firm is \$10,000.

The Muscongus Lumber & Grain Company has erected a new grain elevator at Newcastle, Maine. There are nine bins in the plant with capacity of 45,000 bushels. The elevator is equipped with automatic unloaders, chain buckets, and automatic weighers.

## INDIANA

The Ambia Grain Company, Ambia, Ind., has dissolved as a corporation.

An addition costing \$10,000 is to be erected to the plant of the McCoy-Garten Grain Company of Indianapolis, Ind.

The Remington Farmers Elevator Company which has been operating at Remington, Ind., has filed articles of dissolution.

Lewis Kinnard and his son, Charles Kinnard, have purchased the plant of the Pendleton Elevator Company of Pendleton, Ind.

The Twelve Mile Grain Company has dissolved as a corporation but will continue to operate at Winchester, Ind., as a partnership.

The late B. F. Jones is succeeded as manager of the Goodrich Bros. Hay & Grain Company at Malden (Valparaiso p. o.), Ind., by E. N. Jones.

A. B. Cohee has purchased the Greenfield, Ind., elevator of McBane & McBane. Consideration was \$20,000. The new firm will operate as the Farr & Cohee Company.

The Emporia Grain Company has been incorporated at Emporia, Ind. (Markleville p. o.), capitalized at \$25,000. Walter E. Aiman, Pierre B. Aiman and Jonathan Jones are named as incorporators.

The Amity Elevator Company of Amity (Franklin p. o.), Ind., has sold its elevator to Valentine & Valentine, who operate at Whiteland. The Amity elevator was the property of the Union Starch & Refining Company of Edinburg. It has capacity of 60,000 bushels. The new owners will probably build a new elevator on the site.

## OHIO AND MICHIGAN

G. M. White is no longer with the grain firm of Switzer & White at Galion, Ohio.

Charles Wolchan, Inc., have been incorporated at Birch Run, Mich., capitalized at \$300,000.

The headquarters of the Swartz Creek Grain Company have been moved to Gains, Mich., from Swartz Creek.

The Grange Co-operative Elevator Association of Akron, Mich., has appointed James L. Ross as its manager.

The recently organized Equity Union Exchange has purchased the elevator of Goff & Simon at Russia, Ohio.

A new Randolph Grain Drier has been installed in the plant of the Peoples Elevator & Supply Company of Fremont, Ohio.

The Farmers Elevator Companies of Luckey and Le Moyne, Ohio, have consolidated and will erect a grain elevator at Le Moyne in the spring.

A Sprout-Waldron Separator, a new set of scales and an elevating system have been installed in the

elevator of the Farmers Co-operative Company of Summit Station, Ohio. The improvements make the handling capacity 650 bushels per hour.

Capitalized at \$25,000, M. J. Elebaas and son have incorporated at Grand Rapids, Mich. The company will conduct a grain and supply business.

Sam Chambers, Ray Barer and Wm. Miller have incorporated the Grove City Farmers Exchange at Grove City, Ohio. They will build an elevator there.

The Raabe Bros. Elevator at Muntana (r. f. d. Cloverdale), Ohio, has been purchased by the Muntana Equity Exchange of which F. J. Becker is manager.

The Cleveland, Ohio, plant of the American Chicler Company, has been purchased by the Sheets Elevator Company of Cleveland. Consideration was \$135,000.

The Henderson & Coppock Elevator at West Milton, Ohio, has been leased by the Everett Coal Company. The lessees will operate as the Falknor-Furnas Company.

Townsend & Townsend have sold their elevator at Greenville, Ohio, to Geo. Bayman. The elevator is known as the Henne Elevator. Possession was given Mr. Bayman on January 1. He will handle grain, feedstuffs, etc.

## THE DAKOTAS

Overhauling has been done to the Seffan Elevator at South Heart, N. D.

Business has been resumed in P. A. Frederickson's elevator at Walcott, N. D.

W. I. Thompson's elevator at Badger, S. D., has been purchased by F. I. Oustad.

Plans are being considered for the erection of a farmers elevator at Onida, S. D.

P. H. Christensen has resigned his position with the Farmers Elevator at Gary, S. D.

J. T. Scroggs has purchased the elevator at Hurley, S. D., owned by Rundell & Rundell.

An addition is being built to the plant of the Langdon Elevator Company located at Langdon, N. D.

J. L. Barney is again manager of the Farmers Co-operative Elevator Company operating at Michigan, N. D.

The Farmers Elevator Company located at Goodwin, S. D., has installed a new engine, new belt and rope drives.

The Farmers Elevator Company of Aurora, S. D., has equipped its elevator with a new motor. H. B. Swanson is manager.

The South Dakota Grain Company has sold its elevator at Harrisburg, S. D., to J. J. Mullaney. C. J. Ruslow is manager.

John Olson is manager of the Farmers Elevator at McGregor, N. D. Mr. Olson was formerly located at Hamlet, N. D.

The plant of the Farmers Elevator Company of Foley (Watertown p. o.), S. D., has been equipped with new scales and manlift.

The Farmers Union Co-operative Company of Yankton, S. D., has built an addition to its elevator and enlarged its offices.

H. E. Officer is succeeded as manager of the Farmers Co-operative Elevator Company at Duane (mail to Ellendale), N. D., by Oscar Anderson.

The Crooks Grain Company of Crooks, S. D., has repaired its elevator, and installed some new equipment including a Howe Scale and Globe Dump.

Repairs are to be made to the elevator of the Co-operative Elevator Company of Glen Ullin, N. D. An addition is also to be erected to the warehouse.

The Great Western Grain Company and the Cargill Elevator Company are tearing down their elevator annexes at Hatton, N. D., and are overhauling their elevators there.

The Farmers Elevator Company of Pukwana, S. D., has been repaired and overhauled. The new machinery installed included a Globe Dump, distributor, engine, new scales and metal spouting.

A new manlift has been installed in the plant of the Doering Grain Company, located at Goodrich, N. D. The office and driveway at the elevator have been remodeled and a concrete foundation put in under the elevator.

The capital stock of the Velva Farmers Elevator Company of Velva, N. D., has been increased from

\$10,000 to \$50,000. The increase will make possible the erection of coal sheds and general extension of the business.

H. E. Frost has overhauled his elevator at Esmond, S. D., and equipped it with new leg and metal spouting.

## MINNESOTA AND WISCONSIN

J. J. Christy is manager of the Farmers Elevator Company of West Concord, Minn.

A two-story and basement warehouse is to be erected at Eau Claire, Wis., for the Wisconsin Grain & Cereal Company.

The interests of the La Crosse Grain Company at Fountain, Minn., have been purchased by Thos. Kelly. G. H. Goodfellow is manager.

The Dalton Equity Exchange has been incorporated at Dalton, Wis. F. A. Patrick, Chas. Brene-man and F. Cruckson are interested.

The charter of the Cargill Elevator Company of Minneapolis, Minn., has been amended and capital stock increased from \$200,000 to \$600,000.

Several improvements have been made to the Atlas Elevator at St. Peter, Minn., by William La Croix. A wheat fan and pea spiral has been installed.

Reports state that the seven elevators of the C. S. Christensen Company of Madelia, Minn., have been purchased by the Hubbard & Palmer Company.

The Farmers Elevator Company of Battle Lake, Minn., has decided to operate on a co-operative basis and has purchased a seat in the Minneapolis Chamber of Commerce.

New equipment has been installed in the plant of the Farmers Elevator Company of Wells, Minn. The equipment included a new leg, cleaner and silent chain drag. V. C. Meyers is manager.

The Brillion Mill & Elevator Company, Brillion, Wis., has been discontinued following the dissolution of the partnership between C. H. Kuehl and Henry Carstens. Henry Carstens will continue the business.

The capital stock of the Kilbourn Equity Exchange, Kilbourn, Wis., has been increased from \$20,000 to \$30,000. The constantly increasing business of the company made necessary this increase in capital stock.

The contract has been let by J. R. McDonald for the erection of a new grain elevator at Banner (r. f. d. Calvary), Wis. The building will be 30x30 with storage building 40x100. The plant will be equipped with modern machinery.

The Hedren Grain Company has leased the J. F. Carlson Elevator at Lafayette, Minn. The Carlson Elevator has been closed for the past year. The Hedren company consists of M. J. Hedren, who has been manager of the Lafayette Farmers Elevator Company for 18 years, and his son, H. E. Hedren.

The Farmers Elevator & Milling Company of Black River Falls, Wis., has made plans for the erection of a feed mill and elevator warehouse at Black River Falls. The company is officered by: Ed. Gearing, president; W. P. Wensel, vice-president; Alfred Danielson, secretary; Frank Hryz, treasurer, and F. H. Bruley, managing director. The company is capitalized at \$40,000.

## IOWA

Improvements have been made to the elevator of F. G. Peterson at Moorland, Iowa.

A new elevator is to be erected at Crescent, Iowa, for the Farmers Co-operative Company.

John Engleman has resigned as manager of the Wadleigh Elevator at Rockwell City, Iowa.

A corn handling plant has been added to the elevator of Fred Warnke at Maynard, Iowa.

A grain elevator is being erected at Fort Madison, Iowa, for the Farmers Association of Hancock.

The Farmers Elevator Company of Toledo, Iowa, has employed A. R. Metcalf of Kesley as manager.

A. J. Scharer has been appointed manager for the Richards Equity Elevator Company of Richards, Iowa.

P. Fitzgerald is succeeded as manager of the Farmers Elevator Company of Adel, Iowa, by Ralph Meyers.

The Farmers Co-operative Union has completed a 13,000-bushel concrete elevator at Blockton, Iowa.



It is equipped with a Western Sheller and Cleaner, a modern automatic scale, truck scale and truck dump.

Ed. Speer is succeeded as manager of the Buckingham Grain Company of Buckingham, Iowa, by O. W. Minniss.

Kirby Shadle of Beaver, Iowa, succeeds Ed Boham as manager of the Farmers Co-operative Company at Greenfield, Iowa.

A new Howe Scale has been installed in the plant of the Farmers Elevator & Livestock Company of Jewell, Iowa.

A new concrete building is to be erected for the Farmers Elevator Company of Jolley, Iowa. The elevator has capacity of 35,000 bushels.

Martin Ewaldson is president and H. Mackey, secretary of the Farmers Co-operative Elevator Company, which has been organized at Woodburn, Iowa.

Paul Peterson of Zearing, Iowa, has purchased the elevator of W. H. Bartz located at Montezuma, Iowa. Possession was given new owner on December 15.

A 25,000-bushel cribbed elevator has been erected at Atalissa, Iowa, for the Merchants Elevator Company, replacing the house which burned last September.

J. McNamara is president; E. B. Talbott, vice-president, and O. S. Bast, secretary-treasurer of the recently organized Keokuk Grain Exchange of Keokuk, Iowa.

The Griffith Elevator of Davenport, Iowa, has been purchased by Lee M. Abbey of the Pioneer Grain Company. The new owner will install additional machinery in the plant.

A new warehouse has been built by the Farmers Elevator Company of Ute, Iowa. The elevator has been overhauled and equipped with a new engine. C. W. Harkins is manager.

The elevator of C. H. O'Neill was purchased by the Farmers Co-operative Association of Independence, Iowa, and will be operated by it. F. Z. Hale will be manager of the company.

The East Elevator at Parkersburg, Iowa, has been sold by Nora Van Dusen to the Independent Grain & Lumber Company. The new owners will repair it and put it into operation this spring.

## CANADA

T. Stormer has taken a partnership in the Golden Grain & Flour Company of Victoria, B. C.

The Blaine Lake Grain Growers Association of Blaine Lake, Sask., has been incorporated.

Operations have been suspended for the season in the Atlas Elevator located at Rainton, Sask.

A new addition has been completed to the elevator of the Gem Elevator Company of Erskine, Alta.

The Gillespie Elevator Company has opened a grain elevator at Sangudo, Alta. M. McThay is manager.

The Johnston Bros. Grain & Feed Company, Ltd., of Webb, Sask., has been incorporated, capitalized at \$150,000.

An annex is being erected to the U. G. G. Elevator at Alliance, Alta. Construction work is practically completed.

The capacity of the elevator at Halifax, N. S., is to be increased according to the plans of the Canadian National Railway officials.

The office of the Saskatchewan Co-operative Elevator Company, Ltd., has been moved to Port Arthur, Ont. The company will concentrate its Head of the Lakes business there.

G. Kerr is back with the Saskatchewan Co-operative Elevator Company, Ltd., and will locate as its buyer at Spy Hill, Sask. Mr. Kerr was formerly buyer at Foam Lake, but has been out of business for some time because of ill health.

To handle grain, seeds, feed, hay and flour, the Brechin Milling Company, Ltd., has been incorporated at Brechin, Ont. The capital stock of the firm is \$40,000. The provisional directors of the company are: S. J. Furniss, Martin Brennan, Albert Stewart and others.

The annual report of the United Grain Growers, Ltd., shows that the combined profits of the company and its subsidiaries for the year totalled \$699,770; this is a little more than one-half of one per cent on a total turnover of \$113,000,000. The net profits of the parent company were \$463,675, from which the business profits tax has to be deducted. An official statement gives the following information: The present paid up capital of the company is \$2,508,547; and reserve account total \$1,750,000; in addition there is a special reserve for contingencies amounting to \$50,000; an undistributed credit in the profit and loss account of \$187,000. At the present time the company owns one terminal elevator at the lake front, 218 country elevators, 233 flour warehouses, 108 coal sheds and eight country machinery sheds. The company has 129 elevators leased from the Manitoba Government and a big terminal elevator at the lake front leased from the Canadian Pacific Railway. The

total volume of grain handled by the company in the past year was 24,503,000 bushels, being 10 per cent larger than the volume of grain handled in the previous year. At a meeting of directors, it was voted to increase the company's borrowing power from \$12,000,000 to \$15,000,000.

With the close of the year 1920 the Saskatchewan Co-operative Elevator Company completed its tenth year of operation. The statement for the year shows a paid up capital of \$1,132,737.50; reserves of \$1,233,119.65; net profit of \$224,988.91; cash dividend, \$90,259.60; transfer to reserves of \$134,729.31. In 1911 its paid up capital was \$176,580; reserves \$48,799.05; net profit, \$5,461.60; cash dividend, \$3,662.65; transfer to reserves, \$1,798.95. The company began business with 44 elevators; it now has 294. In 1911 it handled 3,262,000 bushels of grain; in 1920, 19,512,000. It leases terminal elevators with a capacity of 4,650,000 bushels.

## WESTERN

The H. M. Fike Grain Company succeeds Thomas Bros. & Fike at Richfield, Idaho.

The Stone Barn Grain Company of Thermopolis, Wyo., has been purchased by R. A. Kelly.

A new elevator is to be built at Rosalia, Wash., for the Rosalia Supply Company this spring.

A new elevator is to be erected this spring at Las Vegas, N. M., for D. Hock of Albuquerque.

Electric lights and motor equipment has been installed at Lavina, Mont., for the Columbia Elevator.

The Proctor Lumber & Supply Company succeeds the O'Donnell Elevator Company at Proctor, Colo.

The Farmers Warehouse Company has made plans for the erection of a new grain elevator at Farmington, Wash.

A workhouse has been built to the elevator of the Trenton-Clarkston Mill & Elevator Company of Trenton, Utah.

M. C. Johnson is succeeded at Pueblo, Colo., by the Spanish Peaks Coal & Grain Company. A. H. McCray is manager.

The Meridian Elevator Company has installed two Clipper Seed Cleaners and a 100-bushel feed roll at Meridian, Idaho.

The Globe Grain & Milling Company of San Diego, Calif., has built a brick and tile addition to its warehouse at San Diego.

The Manning Elevator Company at Wheatland, Wyo., is succeeded by the Farmers Elevator Company. D. N. Cooper is manager.

The interest of Milford Williams in the grain, hay and coal business at Montpelier, Idaho, has been purchased by Chas. Hess, his partner.

O. N. Cronin's elevator at Outlook, Mont., has been purchased by the Farmers Elevator Company, which now operates two elevators there.

Houx Bros. & Gibson have recently completed a 40x300-foot rice warehouse at Williams, Calif. The plant has storage capacity of 60,000 bags.

The Conley-Ross Grain Company of Denver, Colo., has leased and is operating the elevator of the Isbell Bean & Elevator Company at Limon, Colo.

The Western Mill & Elevator Company has been incorporated at Denver, Colo. The company is capitalized at \$500,000. A. A. Carmichael is interested.

A Clipper Cleaner and a 10-horsepower Fairbanks "Y" Engine have been installed by the Elbert Grain Company of Elbert, Colo. F. Seick is manager.

A grain, feed, flour and poultry supply business is to be conducted at Chewelah, Wash., by A. F. Timm. He has just recently completed a new warehouse there.

The Haxtum Farmers Co-operative Elevator Company of Haxtum, Colo., has built a large addition to its building. It contains a roomy office and storage room.

The elevator capacity of the Farmers Flour Mill & Elevator Company of Ft. Lupton, Colo., is to be increased 20,000 bushels. A 50-barrel mill is also being erected.

A. Smith, L. Y. Williams and J. S. Pederson have incorporated the Auburn Milling & Grain Company of Auburn, Wash. The capital stock of the company is \$20,000.

Notice of dissolution has been filed by the Farmers Equity Elevator Company of Windham, Mont. Henry Larson, J. Earl Stewart and Marion Maury signed the petition.

The Farmers Milling & Elevator Company has built three 12,000-bushel concrete tanks at Broomfield, Colo. The total capacity of the company is now 42,000 bushels.

The Farm Bureau Elevator Corporation of Yolo County, Calif., has made plans for the erection of grain elevators at Davis, Woodland, Zamora, Yolo and Dunning. The San Francisco office of the MacDonald Engineering Company has entire charge of construction. The new elevators are to be built to handle grain directly into cars. They are to be the

links in a general system of bulk grain handling of which the elevator at Oakland, Calif., recently leased from the Western Milling Company, is the key.

A 7,000-bushel elevator is to be erected at St. Vrain, N. M., for the Western Elevators Company, Inc. The company is also erecting a 7,000-bushel elevator at Summerfield.

A new elevator has been completed at New Castle, Wyo., for the D. J. Toomey Produce Company. The elevator is of reinforced concrete, motor driven, with capacity of 12,000 bushels.

The new 50,000-bushel elevator of the Royal Gorge Milling Company at Canon City, Colo., has been completed. In addition to this has been erected a warehouse 20x50 feet.

The Berthoud Farm Products Company is the successor to the Lovejoy Public Elevator Company at Berthoud, Colo. The company is capitalized at \$100,000. C. A. Lovejoy is manager.

The warehouses operated by the Corcoran Mill & Warehouse Company at Angiola, Corcoran, El Rico (no p. o.), and Harvester (no p. o.), Calif., have been purchased by S. C. Dunlap of Los Angeles, Calif. He will operate under his own name.

J. A. Teagarden, W. H. Haileman, J. W. Schmitz, A. E. Lindstrom, G. H. Sawyer, W. H. Walker, T. L. Kilkenny, Fred J. Hare and B. D. Irvine have incorporated the California Farm Bureau Elevator Corporation at San Francisco, Calif. The capital stock is \$1,000,000. The company will handle grain in bulk and ship and sell grain.

## SOUTHERN AND SOUTHWESTERN

The Stroud-Leach Grain Company is now in business at Lufkin, Texas.

J. S. McComb has gone into business at Albany, Texas, and will handle grain, feed and hay.

Repairs have been made to the elevator of the Dalhart Equity Exchange of Dalhart, Texas.

G. E. Harris has sold out his elevator at Canute, Okla., to the Farmers Co-operative Association.

Capitalized at \$5,000, the Stuttgart Rice Warehouse Company has been incorporated at Stuttgart, Ark.

The contract has been let by the Stratford Equity Exchange of Stratford, Texas, for a 25,000-bushel elevator.

The Farmers Co-operative Elevator Company of Mangum, Okla., has increased its capital stock from \$25,000 to \$40,000.

The capital stock of the Fayette Coal, Grain & Feed Company, Lexington, Ky., has been increased from \$10,000 to \$50,000.

The elevator at Clinton, Okla., owned by Clinton Strong, has been purchased by the Farmers Union Co-operative Association.

The D. C. Cartrell Grain Company has purchased the feed and flour business at Stigler, Okla., formerly owned by Mr. Bradley.

Construction work has been completed on the 30,000-bushel elevator of the C. M. Light Grain & Milling Company of Hooker, Okla.

The Sweetwater Mill & Elevator Company of Sweetwater, Texas, is planning to erect a modern grain elevator at Royse City, Texas.

A new 20-horsepower gas engine has been installed in the elevator and grist mill of the Heller-Stadler Grain Company of Cashion, Okla.

The elevator and mill of the Brandon Grain Company at Dothan, Ala., have been purchased by J. J. Daring. Possession was given January 1.

A 100,000-bushel elevator is to be erected at Imo (r. f. d. Enid), Okla., for the Imo Terminal Elevator Company, of which C. R. Kelly is manager.

To construct and operate a grain elevator, the Farmers Co-operative Association has been organized at Hereford, Texas. Its capital stock is \$50,000.

The Farmers Union Co-operative Exchange of Apache, Okla., which has recently completed a new elevator there, has engaged H. F. Rundle as manager.

A large engine has been installed in the elevator of the Bradley Warehouse & Elevator Company at Bradley, Okla., of greater horsepower than the one previously used.

D. Byers, A. M. Bourland and T. H. Shive have incorporated the Vernon Warehouse Company at Vernon, Texas. The capital stock of the organization is \$18,000.

Capitalized at \$100,000, the Arkansas Mill & Grain Company has been incorporated at Hoxie, Ark. P. H. Schwagman, J. W. Pace and C. C. Cherry are interested.

The Rosedale Produce Company, Inc., has been incorporated at Rosedale, Okla., capitalized at \$20,000. The company will conduct a co-operative elevator and warehouse.

The 14,000-bushel elevator of the Oklahoma City Mill & Elevator Company of Okeene, Okla., has been purchased by the Farmers Union Co-operative



Exchange. The Oklahoma City company has also under construction a modern grain elevator of 30,000 bushels' capacity.

The elevator of the Brazil Mill & Elevator Company at Wetumka, Okla., has been leased to the Pickens-Holmes Grain Company. M. L. Wagener of Holdenville is manager.

The elevator of the Buffalo Grain & Coal Company at Buffalo, Okla., has been purchased by the Wallingford Bros. The Wallingford Bros. will make several changes to the property.

The grain business of the J. C. Hunt Grain Company at Wichita Falls, Texas, has been purchased by Overton McDowell. He was formerly with the Wichita Mill & Elevator Company.

Clarence Dawson, A. R. Candler and C. C. Gorrie have incorporated the Dawson Grain & Stock Farm Company. Its capital stock is \$20,000. The company will operate at Montgomery, Ala.

Incorporation papers have been filed by the Farmers Elevator Company of Crosbyton, Texas, capitalized at \$20,000. R. A. Crausby, W. S. McClung and W. F. Wilson are interested.

Operations were resumed in the Sunset Elevator at Galveston, Texas, during the first week of January after a shut down made necessary to repair a conveyor damaged not long ago by fire.

Grain, its products and groceries are to be handled at Dillon, S. C., by the Southern Wholesale & Distributing Company, which recently opened for business there under the management of M. A. Stubbs.

A grain receiving elevator at Archer City, Texas, has been purchased by the Graham Mill & Elevator Company of Graham, Texas. The company now controls six branch elevators in that section of the country.

The J. C. Price Grain Company is succeeded at Enid, Okla., by the Geis-Price Grain Company. The company has purchased the elevator of J. H. Shaw at Enid. The Geis-Price company was formerly in business at Cordell.

R. A. Sanders has resigned his position as manager of the Cordell (Okla.) Mill & Elevator Company and accepted position as superintendent of the Oklahoma City Mill & Elevator Company. R. B. Whatley succeeds Mr. Sanders at Cordell.

Fred Graves has sold his interest in the grain business at Poss, Okla., to his brother, E. A. Graves. He will operate under the name of the Graves Bros. E. A. Graves is manager; Fred Graves will manage the Bell Elevator at David City, Neb.

## MISSOURI, KANSAS AND NEBRASKA

The J. F. Bookwalter Elevator at Pawnee City, Neb., has been purchased by Vern Howard.

The Farmers Elevator Company has purchased the elevator of A. G. Craig at Memphis, Mo.

Frank A. Douglas is now manager for the Farmers Union's elevator and store at Sherdahl (Scandia p. o.), Kan.

Two elevators, one at Hoisington and one at Hargrave, Kan., are to be erected for the Ryan Grain Company.

The Dodge City, Kan., office of the Gano Grain Company of Hutchinson, Kan., is under the management of Joe Fleming.

The elevator of the Meade Elevator Company at Meade, Kan., is now being operated by the O. E. Cox Grain Company.

The Farmers Elevator & Supply Company operating at Clinton, Mo., has increased its capital stock from \$10,000 to \$40,000.

The Samson-Swanson Company of Oakland, Neb., is succeeded in business there by the Swanson Grain & Coal Company.

The Veninga-Smith Grain Company of St. Louis, Mo., has discontinued its cash grain department and will sell its elevator.

A feed store is being erected on site adjoining the elevator of the Farmers Elevator Company of Westboro, Mo., by that company.

Farmers around Rensselaer, Mo., have incorporated the Rensselaer Co-operative Elevator Company. The company is capitalized at \$15,000.

The Boudreau Bros. have sold their elevator at Ewing, Mo., to the Farmers Elevator Company. The Boudreau company is out of business.

O. A. Mitchell has traded in his elevator at Windsor, Mo., to Frank Carter of Clinton, Mo., for the latter's farm of 640 acres. Possession was given December 1.

The McDaniel Milling Company's elevator at Jasper, Mo., has been purchased by the Farmers Co-operative Elevator Company. John Campbell will be manager.

An addition has been built to the elevator of the Keytesville Grain & Elevator Company of Keytesville, Mo. The grain company is controlled by White & Owen.

The last of this month the Farmers Elevator Company of O'Fallon, Mo., is to hold a meeting at which it will decide whether or not to increase

the capital stock and to change the name to that of the Farmers Co-operative Elevator Company. Isaac Maddening, John M. Keithly, J. E. Zarr and Henry Ermeling are interested.

The Farmers Elevator Company's new 30,000-bushel elevator at Prairie View, Kan., has been completed. Earl Schesser is manager and A. W. Young, secretary.

Capitalized at \$50,000, the Valley Park Farmers Association has been incorporated at Valley Park, Mo. The company will build a combination elevator and warehouse.

The Farmers Elevator Company, capitalized at \$10,000, of Leonard, Mo., will handle feeds, etc., this winter and in the spring will build a grain elevator which it will operate.

J. P. Parks of Salina, Kan., will operate there as the Parks Grain Company. He will handle the same accounts as the old company, known as the Parks-Richter Grain Company.

The Farmers Union of Stafford County has purchased two elevators at St. John, Kan., the one belonging to the Farmers Grain Company and the one known as the Ardery Elevator.

C. M. Skinner has leased the Ralston Elevator & Milling Company of Ralston, Neb., to Herman Luenberg and J. Ratchford. The company will buy and sell all kinds of feed and grain.

A co-operative elevator association has been formed at Solomon, Kan., by M. McAuliffe and P. A. Tobin of Salina. A Board of Directors has been elected and the capital stock fixed at \$75,000.

The Associated Mill & Elevator Company of Kansas City, Mo., is building a grain elevator and mill at Bazine, Kan. The plant will be of reinforced concrete with storage capacity of 20,000 bushels.

The articles of incorporation of the Farmers Elevator Company of Ord, Neb., have been amended and capital stock increased to \$100,000. J. C. Meese is president and W. M. Costello, secretary of the firm.

The Farmers Union Co-operative Association is rebuilding its elevator at Knox Siding (York p. o.), Neb., which burned. The elevator will be of concrete fireproof construction with capacity of 15,000 bushels.

J. M. Sedgcock's elevator at Hurdland, Mo., has been purchased by the Farmers Elevator Company. R. E. Whittaker is manager. Two warehouses of about 15,000 bushels' capacity are now in the possession of the Farmers concern.

The Norfolk, Neb., office of the Trusler Grain Company of Emporia, Kan., has been discontinued. The Sioux City, Iowa, office of the company also is no longer in existence. Jas. E. Bennett & Co., of Chicago, have taken over both.

The elevator at Paleman (near Carrollton), Mo., has been purchased by the Farmers Grain & Supply Company. The company now controls three elevators. The company has also increased its capital stock of \$50,000, \$40,000 of which is paid up.

The Farmers Grain Company and the Farmers Lumber Company of Troy, Kan., have consolidated and will operate as the Farmers Grain & Lumber Company. Its capital stock is \$30,000. E. M. Ray is president; R. M. Carter, vice-president, and F. C. Foley, secretary-manager.

The property of the Charleston Milling Company of Charleston, Mo., has been purchased by the Mississippi County Elevator Company which was recently incorporated, capitalized at \$100,000. The mill has a capacity of 400 barrels. H. M. McPheeters, S. M. Shelby, D. I. Douglas, C. E. French, O. F. Goodwin, L. E. Boyce and B. H. Rowe are interested.

## ILLINOIS

C. J. Williams is now manager of the Farmers Elevator at Serena, Ill.

Wm. Woods is succeeded as manager of the Donnellson Elevator of Hillsboro, Ill., by John M. Hampton.

H. H. Roseman of Ocoya is manager of the Weldon (Ill.) Grain Company. He succeeds Wm. Sussdorf.

The Farmers Elevator of Montrose, Ill., has been incorporated. The capital stock of the firm is \$25,000.

The capital stock of the Farmers Grain & Coal Company of Green Valley, Ill., has been increased to \$64,000.

The elevator of Bain Sullivan & Co., of Industry, Ill., has been purchased by the Industry Co-operative Company.

Chas. B. Lewis has leased H. F. Hurst's elevator at Creston, Ill., and will handle grain, seed, feed and salt.

A new concrete elevator costing \$22,000 has been completed at Ferris, Ill., for the Ferris Farmers Elevator Company. The elevator is electrically operated. C. Abbott is manager.

Wm. Mack, Jos. C. Zajicok, Frank J. Schlemmer, Wm. P. Lee and J. W. Rozabek have incorporated the Progressive Co-operative Grain & Feed Com-

pany of Peters Station (Edwardsville p. o.), Ill., capitalized at \$35,000. The company will handle grain, feed, implements, lumber, etc.

The new elevator of the W. T. Bradbury Company at Belflower, Ill., has been completed and put into operation.

The Lorain Grain Company of Lorain, Ill., is succeeded in business by the Lawless Bros. H. H. Lawless is manager.

A new distributing system and spouts have been installed in the plant of the Farmers co-operative Company of Cropsey, Ill.

Thos. Dorherty is succeeded as manager of the Reynolds Farmers Co-operative Elevator Company, Reynolds, Ill., by J. A. Seaver.

Chas. Cotrell is succeeded as manager of the Farmers Elevator Company of McDowell, Livingston County, Ill., by O. W. Ripsch.

The Farmers Elevator Company has been organized at Gerlaw, Ill., under the leadership of Harry C. Smith and Guy Mason.

The Cerro Gordo Co-operative Grain Company of Cerro Gordo, Ill., has appointed Herbert Hendricks as new manager succeeding Mr. Foote.

W. L. Alford's elevator at Girard, Ill., has been purchased by L. C. Canham of Virden. He will operate as the Girard Grain Company.

The plant of the M. J. Hogan Grain Company of Seneca, Ill., is now operated by electricity. The elevator was formerly operated by steam.

The Farmers Elevator Company's elevator at Joy Prairie (Concord p. o.), Ill., has been purchased by C. R. Lewis & Co., for \$7,600.

Robt. J. Reid's elevator at Granville, Ill., has been purchased by the Farmers Elevator Company. The company now operates two grain elevators there.

The Halliday Elevator Company is remodeling its Cairo, Ill., elevator so that in the future it will be able to load bulk grain on barges directly from the elevator.

The Farmers Co-operative Elevator Company's property at Dwight, Ill., is now under the management of Carl Shafer. He succeeds Frank Gibbon as such.

The Vermont Co-operative Company has been incorporated at Vermont, Ill., to handle grain, fuel, building material, etc. The capital stock of the company is \$50,000.

An addition is being erected to the elevator of the Farmers Elevator Company of Batavia, Ill. The addition is 24x50 feet and will be used for seed and feed warehouse.

J. J. Connelly is now in possession of the elevator and grain business at Millersville, Ill. During the past two years the plant has been operated by the Clark Bros.

A Randolph Grain Drier has been installed in the plant of the Farmers Elevator Company at Pleasant Plains, Ill. This is the second Randolph Drier which the Farmers concern has installed in its elevator at Pleasant Plains.

The Farmers Grain Company has been incorporated at Williamsville, Ill., capitalized at \$30,000. The company will purchase the Prather & Groves Elevator there. L. A. Suttle is temporary president.

C. F. Scott has resigned as manager of the Villa Grove (Ill.) Farmers Elevator Company to go with the Farmers Elevator Company of Lake Fork, Ill. He is succeeded at Villa Grove by G. L. Barrick.

Smith & Cox are succeeded in business at Plymouth, Ill., by the Plymouth Farmers Elevator Company. The company is planning to build a new 20,000-bushel vitrified tile elevator in the spring.

The Farmers Co-operative Elevator Company, which was recently organized at Edelstein, Ill., will either buy or build a grain elevator at Edelstein. L. E. Overend is president and W. A. Streitmatter, treasurer.

The Twist Bros. have sold their controlling interest in the elevators at Berry and Breckenridge, Ill. They still have an interest in the plants, however. The elevators will be conducted as Milton Green & Co.

H. H. Wallace, J. C. Anderson, M. C. Hall, W. M. Cooper, C. A. Reynolds, A. J. Hulcher and L. E. Lively have been named directors of the recently organized co-operative farmers elevator company of Nilwood (Carlinville p. o.), Ill.

The Wallace Grain & Supply Company of Ottawa, Ill., has changed its name to that of the Wallace Co-operative Grain & Supply Company and will operate on a co-operative basis. This change took effect January 1. H. A. Bonjes is manager of the company.

The capital stock of the McHenry County Farmers Co-operative Association of Woodstock, Ill., has been increased from \$50,000 to \$100,000. Chas. L. Page is president and A. J. Gafke, secretary of the firm. The company handles grain, farm implements, etc.



## RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for December and year 1920:

**BALTIMORE**—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	3,592,224	1,267,416	2,911,823	2,071,407
Corn, bus.	267,498	286,074	400,017	17,143
Oats, bus.	308,372	101,050	8,547	.....
Barley, bus.	749,063	45,325	556,303	41,667
Rye, bus.	1,101,916	286,513	878,646	186,541
Hay, tons.	2,654	8,053	.....	.....
Flour, bbls.	112,505	275,910	71,831	63,728

**BALTIMORE**—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	33,544,501	26,575,331	29,266,029	26,040,071
Corn, bus.	5,310,433	3,993,011	1,756,669	1,028,953
Oats, bus.	3,816,077	7,317,484	1,917,279	5,711,383
Barley, bus.	1,251,328	4,372,585	835,689	3,916,516
Rye, bus.	20,933,570	7,803,505	19,910,383	8,394,903
Hay, tons.	26,484	36,036	.....	.....
Flour, bbls.	2,089,765	4,107,266	1,780,044	2,348,206

**CHICAGO**—Reported by John R. Mauff, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	2,478,000	2,095,000	1,306,000	2,466,000
Corn, bus.	6,223,000	7,457,000	3,879,000	3,857,000
Oats, bus.	4,559,000	5,920,000	3,828,000	4,291,000
Barley, bus.	1,221,000	1,105,000	590,000	531,000
Rye, bus.	655,000	305,000	317,000	326,000
Timothy Seed, lbs.	2,951,000	1,642,000	2,013,000	2,588,000
Clover Seed, lbs.	1,004,000	1,606,000	464,000	888,000
Other Grass Seed, lbs.	1,461,000	2,735,000	733,000	1,332,000
Flax Seed, bus.	12,000	170,000	.....	76,000
Broom Corn, lbs.	2,782,000	1,192,000	1,357,000	1,140,000
Hay, tons.	20,567	26,077	1,791	1,873
Flour, bbls.	772,000	1,145,000	479,000	783,000

**CHICAGO**—Reported by John R. Mauff, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	28,997,000	76,329,000	36,064,000	61,903,000
Corn, bus.	85,487,000	65,894,000	37,778,000	28,834,000
Oats, bus.	74,939,000	88,939,000	46,421,000	74,137,000
Barley, bus.	11,289,000	25,980,000	4,592,000	13,376,000
Rye, bus.	6,325,000	7,885,000	7,439,000	6,399,000
Timothy Seed, lbs.	35,014,000	46,196,000	26,871,000	33,222,000
Clover Seed, lbs.	11,957,000	12,674,000	6,503,000	6,655,000
Other Grass Seed, lbs.	26,205,000	22,657,000	13,324,000	13,501,000
Flax Seed, bus.	1,160,000	1,077,000	144,000	84,000
Broom Corn, lbs.	17,349,000	21,466,000	14,309,000	19,352,000
Hay, tons.	187,294	261,687	30,592	42,113
Flour, bbls.	3,354,000	10,271,000	6,092,000	6,582,000

**CINCINNATI**—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	169,200	182,400	115,200	285,600
Shelled Corn, bus.	482,400	457,200	288,000	326,400
Oats, bus.	224,000	254,000	250,000	172,000
Barley, bus.	1,300	18,200	.....	.....
Rye, bus.	10,800	6,000	12,000	32,400
Ear Corn, bus.	32,800	82,400	.....	.....
Feed, tons.	1,680	3,150	.....	.....
Hay, tons.	9,372	9,064	.....	.....

**CINCINNATI**—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	3,395,400	.....	.....	.....
Corn, bus.	4,696,800	.....	.....	.....
Oats, bus.	5,130,000	.....	.....	.....
Barley, bus.	96,200	.....	.....	.....
Rye, bus.	249,600	.....	.....	.....
Feed (all kinds), tons	22,380	.....	.....	.....
Ear Corn, bus.	586,400	.....	.....	.....
Hay, tons.	110,263	.....	.....	.....

**CLEVELAND**—Reported by F. H. Baer, traffic commissioner of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	210,500	35,000	.....	.....
Ear Corn, bus.	70,223	144,502	26,572	19,733
Corn, bus.	152,675	124,230	28,821	44,028
Oats, bus.	515,665	266,943	83,250	18,069
Barley, bus.	25,218	3,764	.....	4,106
Rye, bus.	3,035	17,706	.....	5,046
Hay, tons.	3,337	3,301	.....	139

**DULUTH**—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	4,317,989	743,738	4,835,676	766,230
Oats, bus.	252,068	6,008	9,376	134,521
Barley, bus.	58,396	33,652	130,989	292,551
Rye, bus.	1,155,523	1,046,223	1,290,393	565,269
Flax Seed, bus.	611,138	226,931	347,250	112,290

**DULUTH**—Reported by Chas. F. MacDonald, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	42,620,276	23,077,239	41,055,480	33,309,718
Corn, bus.	13,203	801	.....	.....
Oats, bus.	3,163,361	923,577	882,442	966,990
Barley, bus.	3,425,481	6,694,539	3,345,550	7,511,538
Rye, bus.	19,959,589	16,730,994	23,511,074	13,627,844
Flax Seed, bus.	518,791	2,501,991	3,333,255	2,106,526
Flour, bbls.	4,436,392	4,990,180	5,701,167	6,086,870
Produced, lbs.	2,799,900	1,126,805	.....	.....

**GALVESTON**—Reported by H. A. Wickstrom, chief inspector of the Cotton Exchange and Board of Trade (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	.....	.....	44,726,484	16,707,689
Corn, bus.	.....	.....	37,668	.....
Barley, bus.	.....	.....	722,048	1,522,680
Rye, bus.	.....	.....	698,587	.....
Maize and Kaf.	.....	.....	28,401	.....

**GALVESTON**—Reported by H. A. Wickstrom, chief inspector of the Cotton Exchange and Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	.....	.....	5,494,391	1,600,130
Corn, bus.	.....	.....	11,641	.....
Barley, bus.	.....	.....	.....	51,900
Rye, bus.	.....	.....	171,428	.....

**PORT WILLIAM, ONT.**—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	27,924,643	9,601,846	23,812,004	7,369,758
Corn, bus.	1,448	.....	1,449	.....
Oats, bus.	4,849,719	3,043,398	3,051,982	2,409,839
Barley, bus.	1,746,163	980,755	1,214,293	917,991
Rye, bus.	459,478	104,125	455,921	2,590
Flax Seed, bus.	755,238	191,157	365,649	127,636
Mixed Grain, lbs.	3,082,702	2,965,648	787,080	2,151,589

**PORT WILLIAMS, ONT.**—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	137,509,590	86,891,205	127,992,636	96,806,649
Corn, bus.	255,439	321,640	236,557	321,662
Oats, bus.	27,351,712	23,468,468	22,619,510	23,037,473
Barley, bus.	8,793,040	11,552,780	8,338,074	13,604,514
Rye, bus.	2,269,653	1,103,809	2,294,249	1,145,166
Speltz lbs.	10,970	*946	.....	*946
Flax Seed, bus.	2,977,388	1,696,241	2,164,009	1,951,368
Mixed Grains, lbs.	21,695,099	26,498,407	9,531,009	23,005,475

**INDIANAPOLIS**—Reported by Wm. H. Howard, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	114,400	161,250	42,900	102,500
Corn, bus.	2,511,600	2,352,500	1,957,200	1,722,500
Oats, bus.	810,000	590,400	766,000	586,400
Rye, bus.	5,600	8,750	9,800	60,000

**INDIANAPOLIS**—Reported by Wm. H. Howard, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	4,389,100	7,650,000	3,332,200	4,385,000
Corn, bus.	20,687,400	19,147,500	15,450,300	12,061,250
Oats, bus.	17,174,000	11,774,900	16,302,000	8,353,000
Rye, bus.	403,200	376,250	394,400	293,750
Hay, cars.	1,052	1,636	.....	.....
Flour, bbls.	.....	.....	.....	.....
Mfg.	408,041	537,842	.....	.....

**KANSAS CITY**—Reported by E. D. Bigelow, secretary of the Board of Trade:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	6,667,650	7,653,150	6,035,150	5,575,500
Corn, bus.	931,250	1,435,000	383,750	573,750
Oats, bus.	275,400	455,600	268,500	516,000
Barley, bus.	175,500	321,000	156,000	94,900
Rye, bus.	82,500	53,900	135,300	34,100
Kafir, bus.	654,500	239,200	239,000	41,000
Brans, tons.	3,240	5,960	8,400	12,620
Hay, tons.	27,155	53,952	14,856	25,320
Flour, bbls.	39,000	90,025	208,650	361,075

**KANSAS CITY**—Reported by E. D. Bigelow, secretary of the Board of Trade (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	70,738,650	72,137,250	51,979,050	48,285,700
Corn, bus.	10,813,750	15,801,250	4,968,750	9,312,500
Oats, bus.	7,553,100	12,503,500	4,357,500	9,402,000
Barley, bus.	2,461,500	2,140,500	1,378,000	1,149,000
Rye, bus.	893,200	612,700	771,100	339,900
Kafir and Milo, bus.	6,066,500	2,150,500	2,724,000	1,369,000
Hay, tons.	559,860	461,676	259,848	167,076
Flour, bbls.	674,700	790,400	2,930,200	3,372,525

**MILWAUKEE**—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus.	396,881	640,520	111,295	379,320
Corn, bus.	2,043,450	1,412,240	627,495	512,250
Oats, bus.	1,042,320	1,867,450	1,234,850	1,259,700
Barley, bus.	1,096,925	1,010,850	167,710	471,900
Rye, bus.	391,760	434,700	350,620	355,550
Timothy Seed, lbs.	167,630	6,798	72,190	176,922
Clover Seed, lbs.	76,375	912,549	131,284	839,779
Malt, bus.	83,600	70,300	532,108	290,330
Flax Seed, bus.	29,645	9,240	25,777	23,975
Feed, tons	1,040	3,581	168	60
Hay, tons	1,833	1,740	168	60
Flour, bbls.	95,900	57,640	168,860	136,460



SAN FRANCISCO—Reported by W. B. Downes, statistician of the Chamber of Commerce:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, tons..	1,928	5,813		
Corn, tons...	490	1,033		
Oats, tons...	1,747	1,492		
Barley, tons..	19,897	7,915		
Bran, tons...	73	231		
Beans, sacks..	39,091	96,283		
Hay, tons....	4,115	6,335		

TOLEDO—Reported by A. Gassaway, secretary of the Produce Exchange:

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus...	497,300	214,200	98,027	220,822
Corn, bus....	388,750	342,500	65,064	148,672
Oats, bus....	275,750	198,850	170,739	127,792
Barley, bus..	3,600	3,600		705
Rye, bus....	52,800	115,200	35,422	277,571
Timothy Seed, bags .....	2,910	5,908	1,234	3,212
Clover Seed, bags .....	4,980	2,728	3,323	2,973
Alsike, bags..	1,887	2,520	230	1,389

SAN FRANCISCO—Reported by W. B. Downes, statistician of the Chamber of Commerce (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, ctls..	553,695		2,689	
Corn, ctls...	230,403		202	
Oats, ctls...	321,602		15,856	
Barley, ctls..			2,189,091	
Rye, cts....	817			
Hay, tons...	30,970		3,506	
Flour, bbls..	1,623,557		999,442	

TOLEDO—Reported by A. Gassaway, secretary of the Produce Exchange (year):

	Receipts		Shipments	
	1920	1919	1920	1919
Wheat, bus..	5,034,375	8,210,170	1,820,929	2,220,027
Corn, bus....	2,230,585	1,430,500	956,943	607,827
Oats, bus....	4,796,610	5,465,858	3,355,277	4,141,004
Barley, bus..	44,600	122,600	6,707	68,755
Rye, bus....	772,165	1,375,290	752,021	998,447
Timothy Seed, bags .....	45,479	87,989	76,826	94,424
Red Clover Seed, bags..	31,214	24,613	25,144	42,145
Alsike, bags..	7,810	9,162	9,073	11,612

dealers of Oklahoma City, Okla. He was a member of the local Board of Trade. His widow, daughter and one son survive him.

JOHNS.—T. E. Johns died on December 7 at Wixom, Mich. He was at one time associated with the Sioux City Seed Company of Sioux City, Iowa, but retired from active business a few years ago.

LANGE.—Heart failure caused the death of William F. Lange of Aberdeen, S. D. In 1882 Mr. Lange was superintendent for Kellogg-Lange & Miller of St. Paul, Minn., of their elevator at Aberdeen, S. D. At the time of his death he was City Assessor and Clerk of the Municipal Court. His widow and six children survive him.

METCALF.—Lee G. Metcalf died on January 4 at his home in Illiopolis, Ill., after a long illness. He was prominent in both the Illinois and the National Grain Dealers Association. Further details of his life are given elsewhere in this issue.

OSBORNE.—Edw. N. Osborne died after a week's illness on December 26 at a Minneapolis, Minn., hospital. Mr. Osborne, who was 70 years old, was vice-president of the Osborne-McMillan Elevator Company. He was one of the first members of the Minneapolis Chamber of Commerce and commenced in the grain business in 1891.

PAGE.—E. L. Page died at Greene, N. Y., aged 56 years. Mr. Page had been active in the seed business for many years. In 1896 he organized the Page Seed Company; this company was incorporated in 1902 and he was its first president. He was president of the American Seed Trade Association for one term. Mr. Page was also interested in the Page-Phillips Seed Company, Toledo, Ohio, and the Pieters-Wheeler Seed Company of Gilroy, Calif. His widow and two sons survive him.

SEYMOUR.—Harry C. Seymour died at Chicago, Ill., recently. He was a broker on the Chicago Board of Trade with the Keith Estate, operators of the Keith Elevator.

SISSON.—Louis Sisson was killed in an automobile accident at Toledo, Ohio. He was assistant manager for Meeker & Co.

SMITH.—Jesse H. Smith died at his winter home in Pasadena, Calif., recently. He was a well known grain operator and financier at Milwaukee, Wis. His widow survives him.

STORER.—Geo. B. Storer died at Toledo, Ohio, aged 54 years. He was formerly in the grain business at Anderson, Ind.

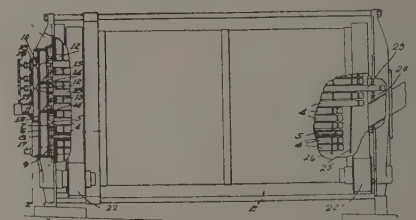
WEIR.—James G. Weir died aged 88 years at Hamilton, Ont. He was a well known grain buyer there.

## GRAIN TRADE PATENTS

Bearing Date of December 7, 1920

Apparatus for heating and tempering grain.—Joseph Howard Mayhew, Minneapolis, Minn. Filed August 21, 1916. No. 1,361,475. See cut.

Claim: The combination, in a grain heater, with a rotating cylinder and a battery of radiation pipes arranged therein, of a heater arranged at the end of said cylinder, and provided with two series of com-

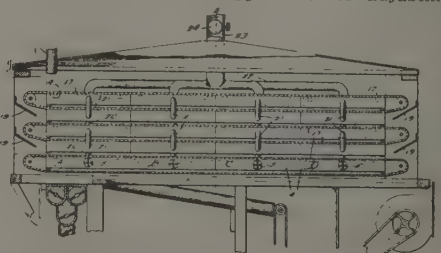


partments, means supporting said pipes in communication with said compartments and means for independently controlling the passage of steam to and from said compartments, substantially as described.

Bearing Date of December 14, 1920

Seed separator electric drier.—Harold L. Gray, Crawfordsville, Ind., assignor to Crabbs Reynolds Taylor Company, Crawfordsville, Ind., a corporation of Indiana. Filed June 3, 1919. No. 1,362,568. See cut.

Claim: In a heating apparatus for a seed separator, the combination of electrically heated trays, said trays being removable from the apparatus for adjustment



and repair of the electrical means contained therein, and means for thermostatically regulating the temperature of the electric heating means.

# FIRE-CASUALTIES

Ft. Scott, Kan.—Fire destroyed the Stout Elevator here with a loss to owners of \$30,000.

Ridge Farm, Ill.—Fire damaged to a considerable extent the grain elevator of the Frank Jones Company.

Wichita Falls, Texas.—Fire damaged the warehouse of the Jones Grain Company with a loss of \$5,000.

Steinbach, Man.—The elevator of P. T. Parkman & Sons was burned. The company will rebuild in the spring.

Biggar, Sask.—The Scottish Co-operative Elevator at this point was recently destroyed by fire with a loss of \$75,000.

Altura, Minn.—Fire, the origin of which is not known, destroyed a grain elevator here, during the last week of December.

Everton, Mo.—On December 20 fire destroyed the mill and elevator of the Everton Roller Mills. The plant will not be rebuilt.

Agricola, Kan.—Fire destroyed the plant of the Star Grain & Lumber Company with a loss of between \$15,000 and \$17,000.

Crossville, Ill.—Fire destroyed the Farmers Elevator, warehouse and two stables, recently. The buildings are partially insured.

Ft. Worth, Texas.—Damages amounting to \$7,000 were caused by fire in the warehouse of the Ft. Worth Grain & Elevator Company.

Winnipeg, Man.—A slight damage was done to the office of the Pacific Elevator Company by fire. The blaze was extinguished by chemicals.

Sinai, S. D.—The grain elevator here owned by C. K. Brooks and managed by S. A. Seward was totally destroyed by fire on December 11.

Dryden, Texas.—The grain business and building of Julian Bassett was destroyed by fire of unknown origin. The loss is covered by \$10,000 insurance. J. D. Nichols is manager.

Archer (Sheridan Co.), Mont.—The Archer Farmers Elevator Company's elevator here was burned to the ground on December 17. The fire was of

unknown origin. The elevator was valued at \$15,000, and was insured for \$10,000. No grain was stored in the plant at the time of the fire.

Ree Heights, S. D.—The office and engine room at the Van Dusen Elevator were destroyed by fire. The loss incurred is covered by insurance.

Macey, Ind.—The grain elevator here owned by Edw. Wood was destroyed by fire together with a garage and two bars. The loss amounted to \$5,000.

Louisburg, N. C.—Fire destroyed the seed house and cotton gin of W. J. Cooper and J. C. Bowden. A corn mill nearby was damaged to the extent of \$200.

Warren, Minn.—The Farmers Elevator here was completely destroyed by fire, the origin of which was unknown. The elevator was valued at \$20,000; grain, \$11,000.

Cuba, Mo.—Fire destroyed the plant of the Cuba Feed & Grain Company not long ago. The insurance amounted to \$3,000 on building, machinery and contents.

Minneapolis, Minn.—Damages amounting to \$1,000 were done to the Soo Elevator, owned by the Bartlett Frazier Company, by fire on December 17. No damage was done to the grain.

Peru, Neb.—Fire on December 24 completely destroyed the Farmers Elevator here together with a large amount of grain. The loss amounted to \$60,000. Some insurance was carried.

Auburn, Wash.—The grain elevator and feed mill of the Volmer-Clearwater Company were destroyed by fire on January 2. The loss entailed amounted to \$40,000. The loss was covered by insurance.

Pueblo, Colo.—The Weisel Seed Company suffered a fire loss recently of \$8,000. The fire originated in an adjoining building. Most of the damage was due to water and smoke. The loss is partly covered by insurance.

Temple, Ga.—On December 24 fire damaged a warehouse owned by J. A. Potate and containing hay and feedstuff valued at \$3,000. The contents were owned by J. A. Potate and W. S. Green. Insurance amounting to \$2,000 was carried.

# OBITUARY

ANDERSON.—John I. Anderson died on December 10 aged 52 years. He had been in the grain business for many years and was president of John I. Anderson & Sons, Richmond, Va.

BURBECK.—After an illness of a couple of weeks, Allen Burbeck passed away at Concord, Mass. He was manager for the Beaver Brook Grain Company at that place.

CLEGG.—Aged 63 years, Samuel B. Clegg died at Youngstown, Ohio. He was associated with the Clegg Bros., and for years has been active in the grain business.

FELL.—Henry G. Fell died recently from kidney and heart trouble. He was formerly prominent in the grain business at Philadelphia, Pa. At the time of his death he resided at Doylestown, Pa.

FOLEY.—Jas. L. Foley, aged 77 years, died at Milwaukee, Wis. He was an old time grain man of Milwaukee. His widow and eight children survive him.

GUNDERSON.—On December 23 G. B. Gunderson died at his home in Minneapolis, Minn. He

was president of the Minnesota Grain Company and member of the Chamber of Commerce. Mr. Gunderson started in the grain business in Minneapolis about 30 years ago. He is survived by his five children.

HILL.—Henry F. Hill, aged 44 years, manager of the grain elevator at Rays Crossing, Ind., died on January 4. He leaves two daughters, a sister and brother.

HISS.—On December 8, James Hiss died at Baltimore, Md. He was senior member of James O'Connor & Sons, and was a member of the Chamber of Commerce.

HUTCHINSON.—Hiram N. Hutchinson died recently at the home of his sister in Brooklyn, N. Y. He was a retired grain merchant of Cambridge, Mass., and was an old time member of the Boston Chamber of Commerce. He was 68 years old at the time of his death.

KING.—Stephen T. King died suddenly at his office on December 14. He was connected with the Hardeman-King Company, wholesale grain and feed



Grinding plate for feed mills.—Byron A. Shaw, Bradford, N. Y. Filed June 21, 1920. Number 1,366,915.

#### Bearing Date of December 21, 1920

Grain treating supply tank.—John O. Pierson, St. John, and Earl M. Pierson, Albion, Wash. Filed May 1, 1920. No. 1,363,053.

Grain separator.—Charles A. Rieck, Delano, Calif. Filed February 9, 1920. No. 1,362,896.

Grinding and pulverizing machine.—Frederick W. Lehrack, Kansas City, Mo., assignor of five-eighths to Feeders Supply Company, Kansas City, Mo., a corporation of Missouri. Filed July 21, 1919. No. 1,362,948.

Sifter for feed mills.—George E. W. Marsden, Beloit, Wis., assignor to George B. Slater and George E. W. Marsden, Beloit, Wis., co-partners doing business as Slater & Marsden. Filed August 1, 1918. No. 1,362,725.

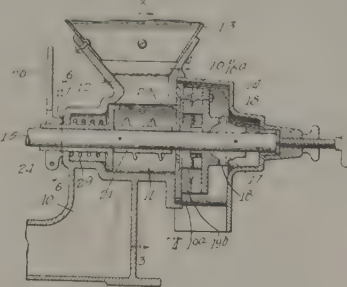
#### Bearing Date of December 28, 1920

Belt conveyor.—Hermon E. Howard, Chicago, Ill., assignor to Weller Manufacturing Company, Chicago, Ill., a corporation of Illinois. Filed November 2, 1917. No. 1,363,469.

Feed mill.—George E. W. Marsden, Beloit, Wis., assignor to George B. Slater and George E. W. Marsden, Beloit, Wis., co-partners doing business as Slater & Marsden. Filed August 1, 1918. No. 1,362,724. See cut.

Claim: A feed mill having, in combination, a feed chamber, a grinding chamber aligned with said feed chamber, a rotary shaft passing through both cham-

bers, a worm fixed on said shaft in the feed chamber, a grinding element fixed on said shaft within the grinding chamber, a stationary grinding element including a plate mounted in the grinding chamber, the plate having an opening through which said shaft extends, a regulator comprising a hub portion surround-



ing said shaft at one end of said worm, and a gate portion positioned at the opposite end of the worm and adjacent to said plate, said gate portion being arranged to cut off more or less of said opening through the plate when rotated, a spring surrounding said hub portion and acting to hold the gate portion close to said plate, said hub portion projecting through one end of said feed chamber, and a handle fixed on the projecting end of said hub portion adapted to be moved by the operator to adjust the position of the gate to control the size of the opening through said plate.

Screen shoe feed for corn and feed mills.—Robert C. Meadows, Pores Knob, N. C. Filed May 14, 1920. No. 1,363,425.

## HAY, STRAW AND FEED

The Wolston Hay Company of Montreal, Que., has been dissolved.

A feed mill has been installed at Elizabeth City, N. C., by Daniels & Cox.

A feed mill has been installed at University Place, Neb., for E. Seeley.

The old brewery at Abbotsford, Wis., has been converted into a feed mill by Ira Hawks.

A feed mill is to be installed at Sumner, Wash., for the Puget Sound Co-operative Feed Association.

John Fisher and Louis E. Todd have incorporated the Fisher-Todd Feed Company of Kirkland, Wash.

Gardner & Rye have retired from the feed business at Russellville, Ark. This took effect January 1.

The Hackney Feed Company is succeeded at Knoxville, Tenn., by the Hackney, Kearns & Lackey Company.

The Canadian Feed Manufacturing Company of Ft. William, Ont., has been reorganized with W. J. Baker, secretary-treasurer.

A feed mill has been opened at Bloomville, Wis., by Adam Jeskewitz. The plant is operated by a 50-horsepower steam engine.

Dairy feed, hog, horse and mule feeds are being manufactured in the feed mill of the Dimple Milling Company of Columbia, Tenn.

W. S. Woodcock, dealer in feed and flour at Edwards, N. Y., has changed the name of the company to W. S. Woodcock & Son.

J. A. Hair and E. C. Spence's interest in the Le Roy (Ill.) Feed & Supply Company has been purchased by their partner, J. W. Mitchell.

The Fitzgerald Bros. Company, wholesale dealers in hay and grain at Cincinnati, Ohio, has increased its capital stock from \$25,000 to \$50,000.

A new warehouse is now occupied by the Early-Stratton Grocery Company of Memphis, Tenn. The company handles feed, grain products, etc.

A 100-ton crushing plant is to be erected at Clarendon, Texas, for the Texas Grain Products Company of Dallas. E. F. Ballard is in charge.

A new storage warehouse has been erected for the General Flour & Feed Company of Buffalo, N. Y. The company conducts a feed milling plant.

The feed business at Evansville, Ind., formerly conducted by the Fisher Bros., is now operated by the Diamond Mills. J. J. Jennings is interested.

The feed and flour business at Stigler, Okla., formerly owned by Mr. Bradley, has been purchased by the D. C. Cantrell Grain & Produce Company.

A wholesale grocery department has been opened by John Wade & Sons, Inc., of Memphis, Tenn. The company will handle their feed and flour products direct.

The Cereal By-Products Company of St. Louis, Mo., has been reincorporated by W. O. Greene, Elser Heater, William F. Becker, Jr., E. W. Sommer and I. K. Reiser. The company is capitalized at \$25,000. The new company will operate on the same lines as in the past with main offices at St. Louis. William

F. Becker, Jr., will manage the Chicago office, 609 Postal Telegraph Building; E. W. Sommer, the Memphis office, 413 Central Bank Building.

To conduct a feed and flour business, the New Exchange Company was incorporated at Oconto Falls, Wis. The company is capitalized at \$5,000.

J. Crawford Hudson, Jos. Wright and J. A. Ferguson have incorporated the Purity Feed Company of El Paso, Texas. The company is capitalized at \$10,000.

A large alfalfa mill has been established at Hoehne, Colo., for the Shamrock Alfalfa Milling & Elevator Company of Lamar, Colo. H. A. Grant is manager.

Owen Bates is now sole owner of the feed and flour business at Marshall, Ark. The business at one time was owned by M. L. Crow, subsequently by Addington & Bates.

A full line of feeds is carried by the Moline Flour & Feed Company which recently opened for business at 1726 Fifteenth St., Moline, Ill., with Geo. Siefken as manager.

The McKee Bros., of Muscatine, Iowa, have remodeled and improved their feed mill. The elevator storage capacity has been increased and new electric motor drives installed.

A. H. Simmons is no longer with the feed and flour company at Middletown, N. Y., which bore his name. The business is now conducted by John W. Halliday and Herb. J. Barndt.

The Stillwater Produce Company has purchased the feed business of H. B. Huckstep at Stillwater, Okla. L. E. Callane is manager. The company will handle produce as well as feed and seed.

To erect and operate a feed and flour mill, the Readlyn Farmers Equity Company has been incorporated at Readlyn, Iowa, capitalized at \$30,000. John Strottman and L. C. Warnecke are interested.

A feed and coal business is to be started as the Ford Coal & Feed Company by W. C. Wright and E. J. Ford of Danville, Ky. They have leased the old Dillehay Bins and Warehouses from J. L. Butler.

The Sarcxie Flour & Feed Company of Sarcxie, Mo., has sold its feed business to E. J. Johnson of the Boyd Milling Company. The flour end of its business has been sold to a Carthage, Mo., concern.

The Arndt Bros. Company has been organized at Sheboygan, Wis., capitalized at \$75,000 by Rudolph W., and William Arndt and T. M. Bowler. The company will conduct a wholesale and retail business in feeds.

A new mill is to be erected at Greeley, Colo., for the Colorado Milling & Elevator Company of Denver, Colo., at a cost of \$400,000. The mill now in operation there is to be used for grinding feeds and grinding coarse grain.

The Galesburg Molasses Feed Company has been incorporated at Galesburg, Ill., by S. H. Whitenack, C. S. Burnside, C. R. Pendarvis, B. L. Christy, F. M. Purviance, and F. G. Holloway. The capital stock

of the firm is \$125,000. The company is erecting a new plant, which it expects to have ready for operation by March 1.

To handle flour and feed, the Farmers Co-operative Milling Company has been incorporated at Youngsville, N. Y. A. L. Crippin is president; P. O. Wilcox, vice-president; D. L. Young, secretary, and Ira Johnson, treasurer.

A feed and flour mill has been installed at Arlington, Wash., for Z. Hodges & Son. The company will grind, roll and mix grain as stock and poultry feeds. The company will also deal in grain, flour, hay, fertilizers, seeds, etc.

The Barrymore Alfalfa Products Company has been incorporated at Jerome, Idaho, capitalized at \$50,000. The company will conduct alfalfa mills. Albert Hawkinson, R. O. Bethune, R. A. Bowman, T. M. Haymond and J. W. Williamson are directors.

The Carolina Remedies Company has been organized at Union, S. C., to manufacture livestock foods and remedies. The company is capitalized at \$250,000. Dr. J. W. Buchanan is president; F. J. Parham, vice-president and secretary and R. A. Oliphant, treasurer.

Dan B. Granger & Co., hay and grain commission merchants of Cincinnati, Ohio, report January 11 that all offerings of hay were taken as fast as made indicating that while the hay market is steady at old prices we are apt to see slightly higher prices soon. Rye was in demand and strong.

The announcement has been made of the organization of the Black Hawk Flour & Feed Company with home offices at Terre Haute, Ind. The company will conduct a general feed, flour and grain business and has a capital stock of \$10,000. John Schwerdt, William Kipple and A. Hubble are directors.

#### FOUR HUNDRED NEW MEMBERS WANTED

A very active campaign is in progress towards securing new members for the National Hay Association. Geo. F. Brown, chairman of state vice-presidents of the organization, reports an activity on the part of this committee that is showing excellent results and invites friends of the National Association everywhere to join in the work of promoting an increased membership.

The National Hay Association, the organization of the hay trade, was established in 1892 and has lent wonderful aid in advancing the interests of the consumer, the producer, the shipper, and the receiver of hay. All firms and dealers connected in any way with the hay business should join the organization and reap its benefits. Mr. Brown, chairman of state vice-presidents, will be glad to mail an application blank, or same can be had from J. Vining Taylor, secretary, Winchester, Ind.

#### THE GEORGIA BUSH VELVET BEAN

BY N. L. WILLET

The Velvet Bean of the South is the largest of our leguminous plants. These bean pods as gathered and soaked overnight can be fed like corn. The Velvet Bean is usually planted in the corn rows and trained on the corn stalks. Cattle and hogs are intensely fond of these frost bitten vines and beans. Cattle from the Northwest a year ago were brought down in car lots to Georgia to graze in our Velvet Bean corn fields during winter time and were then carried back to the West. The cattle and hog industry of the South depends absolutely upon the Velvet Bean crop. So abundant is the out-turn per acre that feeding cattle and hogs with us here in winter is as cheap (and of course is far better) than is summer grass grazing. In the average corn field these Velvet Beans will yield as much per acre in beans as does the corn in grain. The usual type of these running beans is the Georgia One Hundred Day.

Now five years ago there developed a variety in South Georgia (where the Georgia Hundred Day Velvet was first produced) which was named the Georgia Bush Velvet Bean. It does not climb. It grows three to three and one-half feet high and about three feet across. It stands up sturdily. It can be broadcasted for hay about one bushel to the acre, or in corn, planted in five foot rows, it can be planted in the middles every three feet and the crop will pretty well cover these middles.

The crop can be gathered at almost any stage. Cut in the green stage it makes the finest of hay, easily cured, and will make twice as much hay per acre as will the Cow Pea. It can be allowed to mature and the crop can be cut down, piled up, and fed whole or bean pods can be picked off and the balance of the forage fed. It has a big root system. Stock like it better for grazing than they do the running types. The beans of this Bush Velvet all develop on stout limbs near the ground. The stems are all hollow and easily cure.

The bean is round and speckled, and about the size of the end of the little finger. They shell out approximately 25 bushels per ton of beans in the hull. This bean would probably mature as high as the thirty-fourth parallel latitude. Here at Augusta, Ga., it matures as planted at any time from corn planting time up until June the first. South



of us in South Georgia it is largely planted for maturing purposes after grain is off the ground. In many respects it is far superior to the Cow Pea and it has given still more interest and economic value to the Velvet Bean industry.

## GAS FROM STRAW

A gas obtained by the destructive distillation of wheat, oat, and rye straws is now being produced upon a small scale at the experimental farm of the United States Department of Agriculture at Arlington, Va. Although an automobile has been operated with the new combustible, and it has been used for illuminating purposes as well as for cooking, the possibilities of straw gas are not yet fully determined, the department says. The work can be carried on but slowly owing to the limited funds available at present, but it is planned to do much that will determine the quantity and nature of the gas that may be obtained from wheat, oat, barley, rye, and rice straws, and from cornstalks, corncobs, and other vegetable matter usually burned as waste.

If the results of these tests warrant further investigation the experiments will be extended to the problem of plant equipment for producing the gas on a scale sufficient to allow the farmer to supply light and heat for his house, power for stationary engines, and, possibly, for his tractor from a small individual outfit. Straw gas is not a new thing. The present process was developed by George Harrison, a Canadian engineer at Moosejaw, in 1914, who later co-operated on the project with Prof. MacLaurin, of the University of Saskatchewan, Saskatoon, Canada.

Several valuable by-products are obtained in the manufacture of the gas. Carbon residue suitable for manufacturing lampblack of exceptionally fine quality is one. This residue also contains certain amounts of potash, phosphates, and nitrogenous compounds which give it fertilizing value. The tar and ammoniacal liquids resulting from the process, aside from their value as disinfectants and preservatives, may prove useful in the dye industry.

## A SHORT HISTORY OF ALFALFA

Lloyd M. Wilson, general manager of the Denver Alfalfa Milling & Products Company, gives the following interesting history of alfalfa in a recent issue of *Mealology*, the wide-awake little house organ of that company:

"Alfalfa can be traced back to ancient times. It came, very likely, from southwestern Asia, through Persia to Arabia, whence it got its name, which simply means best forage. About 500 years before Christ the Persians invaded Greece. As city after city was taken, the Persians seeded the soil with alfalfa. It is even thought that soldiers ate it as well as horses and cattle, for green succulent alfalfa has often been boiled and eaten as greens or potage. From Greece alfalfa spread into Rome. The exact time is not known, although books written about the year 56 A. D. refer to it.

"From Italy alfalfa naturally spread wherever the Roman farmer colonist penetrated—through France, Spain, England, and doubtless Germany. Some think that Spain also received alfalfa from the

in America. The second from England, France and Germany to the Eastern States early in the history of colonization. Alfalfa worked west from this source very slowly, quite contrary to the rapid movement in the West. From California the next state invaded was Utah, and from there it spread almost to every state in the West.

"During the year 1918 the yield for the entire country was over 14,730,000 tons. The average price for hay during this period was about \$19.50 per ton, making the value over \$285,000,000."

## A VETERAN FEED PLANT IN DIXIE

Many northern people have an idea that scientific stock feeding in the South is something new, a development of the diversified farming campaign



E. WILKINSON, PRESIDENT

which started just previous to the war. But if you should ask E. Wilkinson, president of the Western Grain Company of Birmingham, Ala., he will smile gently and remind you that he has been making mixed feed for the southern trade for 30 years.

The plant of the company has rail connections with the Frisco, Illinois Central, Central of Georgia and Seaboard Air Line Railroads and distributes its grain, hay, and mixed feeds over a wide territory. The meal, grits and mixed feeds are put out under the brand name "Jim Dandy," and they have established for themselves a reputation for quality.

As may be judged from its appearance the plant has been added to from time to time as the needs of the growing business warranted. It covers quite a large area and consists of two elevators,

house. It is then sent to any of the 10 storage bins or to the feed department for grinding or mixing. Corn, oats, Milo, Kaffir, and ingredients for molasses and hen feed are handled. A 2,000-bushel corn sheller takes care of the corn which comes in on the cob, and much of the southern corn is handled in that way, and two Sprout, Waldron Attrition Mills grind it. The meal and feed mixing equipment is complete.

Power is furnished by seven General Electric and Westinghouse Motors, developing a total of 500 horsepower, the current coming from a central station. The transmission is both rope and belt.

## FEED TRADEMARKS REGISTERED

133,996. Dairy feed. International Sugar Feed Company, Minneapolis, Minn. Filed December 30, 1919. Serial No. 126,636. Published April 27, 1920. Registered August 10, 1920.

134,294. Dairy feed. St. Albans Grain Company, St. Albans, Vt. Filed April 5, 1920. Serial No. 130,695. Published May 11, 1920. Registered August 24, 1920.

134,069. Stock feed. Ralston Purina Company, St. Louis, Mo. Filed February 19, 1920. Serial No. 128,616. Published April 20, 1920. Registered August 10, 1920.

134,081. Hog and cattle feed. Schreiber Milling & Grain Company, St. Joseph, Mo. Filed November 10, 1919. Serial No. 124,738. Published April 20, 1920. Registered August 10, 1920.

134,124. Scratch feed. Western Feed Manufacturers, Inc., Chicago, Ill. Filed January 15, 1920. Serial No. 127,191. Published April 20, 1920. Registered August 10, 1920.

134,125. Horse feed. Western Feed Manufacturers, Inc., Chicago, Ill. Filed January 15, 1920. Serial No. 127,193. Published April 20, 1920. Registered August 10, 1920.

134,126. Horse feed. Western Feed Manufacturers, Inc., Chicago, Ill. Filed January 15, 1920. Serial No. 127,197. Published April 20, 1920. Registered August 10, 1920.

134,127. Rabbit feed. Western Feed Manufacturers, Inc., Chicago, Ill. Filed January 15, 1920. Serial No. 127,198. Published April 20, 1920. Registered August 10, 1920.

134,128. Scratch feed. Western Feed Manufacturers, Inc., Chicago, Ill. Filed January 15, 1920. Serial No. 127,199. Published April 20, 1920. Registered August 10, 1920.

134,129. Stock feed. Western Feed Manufacturers, Inc., Chicago, Ill. Filed January 15, 1920. Serial No. 127,202. Published April 20, 1920. Registered August 10, 1920.

134,863. Dairy ration. Penn Grains & Feed Company, Philadelphia, Pa. Filed July 16, 1920. Serial No. 135,060. Registered September 14, 1920.

134,863. Dairy ration. Penn Grains & Feed Company, Philadelphia, Pa. Filed July 16, 1920. Serial No. 135,060. Registered September 14, 1920.

135,225. Mixed feeds for horses, cattle, hogs, dairy cows and poultry. Donmeyer, Gardner Company, Peoria, Ill. Filed March 10, 1920. Serial No. 129,490. Published June 1, 1920. Registered September 28, 1920.

135,927. Dairy, stock, cattle and farm animal



PLANT OF THE WESTERN GRAIN COMPANY, BIRMINGHAM, ALA.

Moors. Alfalfa throve in Italy, in much of Spain and in parts of France. Where it throve no other forage plant could compete with it. It was introduced into England but the yield was small.

"Alfalfa may be traced to America by two routes. The first from Spain to Peru, Chile, Argentina, and Mexico, and from Mexico to New Mexico, Texas, and California; in 1851 from Chile to California, which marked the really important step in alfalfa growing

the feed mill, extensive warehouse, and office. It is of brick construction, and in spite of its gradual development is conveniently arranged for receiving and shipping as well as for handling within the plant.

The elevators have a capacity of 60,000 bushels. An automatic car shovel empties the cars into the receiving pits from which it is elevated to the grain cleaners of which there are three in the

food. The Buckeye Cotton Oil Company, Cincinnati, Ohio. Filed May 11, 1920. Serial No. 132,289. Published June 15, 1920. Registered October 26, 1920.

136,270. Mixed animal feed. H. L. Halliday Milling Company, Cairo, Ill. Filed July 24, 1918. Serial No. 112,303. Registered October 26, 1920.

135,238. Stock food. Faber & Co., Peoria, Ill. (Continued on Page 580)



## FIELD SEEDS

The seed and feed store of H. H. McVeigh of Oskaloosa, Iowa, has been moved to 112 First Avenue, E.

The capital stock of the H. E. Saier Company, Inc., of Lansing, Mich., has been increased to \$100,000.

A Randolph Grain Drier has been installed in the plant of the Healy Seed Company of Belle Center, Ohio.

Dietz & Trivett have been organized to conduct a seed business at Manhattan, N. Y. Their business offices are at 86 Park Place.

A building permit has been issued to the Milwaukee Seed Company of Milwaukee, Wis., to rebuild its plant which burned a short time ago.

The stock of the Cassville Produce & Seed Company of Cassville, Mo., has been sold. The building has been leased to the Farmers Exchange.

Seed handling and cleaning machinery has been installed by the Bemmels-Bruns Company of Elkhart, N. D. The company recently improved its grain elevator.

The new seed house of the Interstate Seed & Grain Company of Fargo, N. D., has been completed. R. Gunkelman is in charge. Modern cleaning and handling machinery has been installed.

To conduct a general wholesale and retail business in field and garden seeds, L. W. Lingle & Co. have opened for business at Windsor, Mo. Mr. Lingle has for 15 years been in the seed business.

The Union Seed & Fertilizer Company of New Orleans, La., has consolidated with the American Cotton Oil Company. The business will be conducted under the name of the American Cotton Oil Company.

John B. Gibbs is president; C. J. Welton, vice-president, and G. C. Warlick, secretary-treasurer of the Hickory Seed Store, Inc., of Hickory, N. C. The company will handle field and garden seeds and feedstuffs.

The Valley Seed Company of Sacramento, Calif., has been purchased by the Wm. A. Ward Seed Company. The company is now located in a new four story brick building, and will conduct a wholesale business exclusively.

The capital stock of the Kirby Seed Company of Gaffney, S. C., has been increased from \$10,000 to \$300,000. The company has plans under consideration for the establishment of warehouses in Columbia, S. C., Atlanta, Ga., and Vicksburg, Miss.

J. A. Simmers, Ltd., dealers in seeds in Toronto, Ont., have passed into the hands of John G. Purvis, general manager of the Wm. Rennie Company, Ltd., Toronto, and C. S. Morrow of Morrow & Co., Toronto. The capital stock of the Simmers concern was \$150,000. The transfer of the company to the new owners is a direct result of the death last August of D. A. Coulson, the last surviving official of the company.

## VALUE OF PURE SEED

The use of pure seed on 1,040 acres of Idaho lands under supervision of the University Extension Division has increased the production in yields over 133½ per cent. The tests were made on tracts of land in five counties by 62 demonstrators. Each realized \$749.69 more than if ordinary seed had been planted. The average yield was 42 bushels per acre as compared with 18 bushels. The total increase in value on 1,040 acres was about \$47.37 per acre. According to B. F. Sheehan, field agronomist, some of the seed tested 99 per cent pure.

## THE TOLEDO SEED MARKET

BY C. O. BARNHOUSE

The Toledo seed market as a whole has been rather steady during the last month. Red Clover has experienced some wide fluctuations but in the course of a few days passes a given point. The market for all seeds is in a very healthy condition and holders are in an optimistic mood as the period of heavy distribution approaches. They feel that there will be a good demand for all supplies and that prices will be well maintained and the probabilities are for a good advance. The stocks of Red Clover and Timothy are up to the average, with those of Alsike somewhat below normal.

Receipts for the year 1920 at Toledo were: Clover 31,244 bags, Alsike 7,810, Timothy 45,480 against 24,613 Clover, 9,162 Alsike, and 37,970 Timothy for 1919. Shipments for 1920 were: 25,144 Clover, 9,073 Alsike, Timothy 76,826—1919: 42,145 Clover, 11,612 Alsike, and 94,424 Timothy. W. E. Heffron, representing the Albert Dickinson Company of Chicago, called on the seed trade of Toledo January 7.

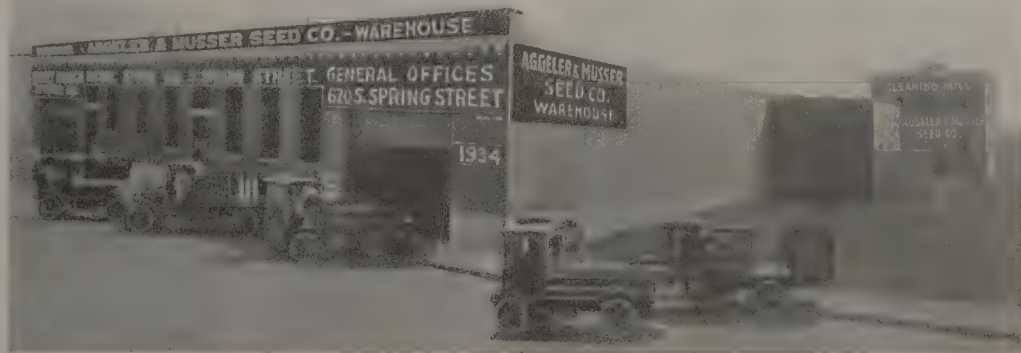
## NEW SEED HOUSE IN THE WEST

One of the newest seed plants in California is that of the Aggeler & Musser Seed Company of Los Angeles. It is located at 1924-34 East Fifteenth Street, on one of the main thoroughfares leading into the business district of the city from the rich farming section to the south. The property is equipped with sufficient trackage at the rear to handle a large volume of carload business and is well equipped for shipment by trucks, which can be loaded from elevated platforms under the roof, with sufficient space for a number of large trucks to be loaded at the same time.

The plant consists of a large warehouse of fire-proof construction and a cleaning mill, two stories in height. The warehouse has a driveway on each side, as a large part of the deliveries are made by the extensive fleet of motor trucks operated by the company. The front part of the warehouse is occupied by the local office, and the warehouse proper is in the rear, well lighted by roof transoms.

The cleaning mill is equipped with the latest machinery for separating, cleaning and conditioning seeds of all kinds.

Under the same lease as the buildings were acquired, the company has taken sufficient land for a trial ground, which is used mainly for test-



PLANT OF THE AGGELER &amp; MUSSER SEED COMPANY, LOS ANGELES

ing stocks for both germination and type. By means of these tests assurance of the real value of the seed handled can be obtained.

The plant is one of the most modern and complete in the West, and the company is justly proud of the establishment and of the line of seeds which it handles. The general offices of the company, as well as the retail store, is located at 620 South Spring Street, Los Angeles.

## THE MILWAUKEE SEED MARKET

BY C. O. SKINROOD

Milwaukee seed dealers look for a decided increase in the activity in the seed market in the next few weeks. "We believe that starting about January 15 to 20, there will be, for a period of three months, one of the greatest rush seasons in the seed trade that we have ever had," is the verdict of the Milwaukee Seed Company, which will be in full operation in its buildings again by the time this reaches the reader. The company is rallying promptly after its recent fire and is in condition to take care of its business with dispatch.

The general seed market has shown considerable strength in the last few days, is the opinion of the Milwaukee Seed Company in its monthly report on conditions. It is reported that both jobbers and semi-jobbers are now buying seed and stocks are larger, especially on the new crop seed. The market for Red Clover seed has advanced \$2 a bushel in the last 10 days, and still higher prices are looked for soon. Stocks of such seeds are not very large as compared to normal years. "Our stocks of Red clover are in fact the lowest we have had in 10 years, especially so on new crop seed of good quality," the report declares. The company is paying from 18 to 21 cents a pound for this class of seed. As for Alsike, the company reports that there is considerable left in the country, but the farmers are not free sellers. The quality of this variety is said to be good and the company is paying on a basis of 18 to 25 cents.

The Alfalfa market, the company reports, has been strengthened up about \$3 on each hundred pounds and the market is declared to be ranging from 20 to 21 cents a pound. Timothy receipts are very light, while the price is ruling from 6½ to 7½ cents a pound.

Shipments of Clover seed for the month of De-

cember from the Milwaukee market were much larger than receipts according to the reports compiled by the local Chamber of Commerce. Shipments of Clover seed were given at 131,284 pounds, while the receipts were reported at 76,375 pounds, or close to half of the shipments.

Receipts of Timothy seed in December at Milwaukee were far above the shipments, receipts being 167,630 pounds as compared with 72,190 pounds shipped out.

The Wisconsin State Department of Agriculture is waging war against the so called "bargain" seed houses. These houses are said to be shipping adulterated and cheap seed to the farmers of Wisconsin. For several years the seed and weed control department has been warning farmers against the purchase of seeds from certain mail order houses outside of the state.

The final report on state production shows that Wisconsin produced no less than 338,000 bushels of Clover seed in the past year, so the state retains its previous title of being the largest Clover seed producer in the country. The area dropped from 201,000 acres a year ago to 169,000 acres the past year, while yield dropped from 402,000 bushels to 338,000 bushels. The drastic cut in prices however, has hit the farmers of the state hard, the farm price a year ago being fixed at \$26.60 a bushel as compared with \$10.94 for the harvest of 1920. The total value of the crop thus declined from \$10,693,000 a year ago to \$3,698,000 for the year ending December 31, 1920.

Wisconsin still produces the most dry peas of any state in the Union, but the crop is rapidly declining in this state. The acreage dropped from 66,000 acres a year ago to 56,000 acres for 1920. Production was just a little over 1,000,000 bushels

of prices, went down from \$2,511,000 in 1919 to \$1,972,000 for the year 1920.

The L. Teweles Seed Company finds that there is very little difference in present seed market prospects from those that prevailed a month ago, except that there is perhaps more of a silver lining to the cloud of depression. The company reports just enough optimism to believe that things will pick up appreciably within the next four or five weeks. The big fact in the trade, the company reports, is that the farmers are still holding back. The decline, it is said, has been extremely discouraging to the farmers and so far they have not felt like selling their seed supplies in any large quantities.

The Red Clover received is of good quality, the company reports, with supply and demand about equal and prices running from \$18 to \$21. Other prices, the company finds, are about unchanged from a month ago with White Clover at \$40 to \$48, Alsike at \$18 to \$25, Alfalfa seed at \$17 to \$19, and Timothy at \$6.50 to \$7.

The outlook in the seed trade is better, according to the Courteen Seed Company. The company finds a very active demand for seeds of all kinds and expectations are for a good trade in the future. The great difficulty, the company, reports, is that the farmers are not ready to sell at the prevailing price levels. Most of the seeds are still in the hands of the farmers and not in the hands of the dealers, as is usually the case at this season of the year, the report says. Ultimately, the farmer will let go of his supplies, and that is what the company implies when it declares there will be a revival in the seed trade.

An excellent outlook for the seed trade is the verdict of the Kellogg Seed Company. The company finds a great increase in the number of inquiries for seeds and that these are actually the most promising they have been at any time for the past two or three months.

The company believes that the farmers, who are still hanging on to their seeds for better prices, are likely to sell a little later in the season and that within one month it is likely that business in seeds will be very brisk. The Kellogg people believe that the seed trade will develop enormously in a short time and that it may be difficult to handle.

(Field Seeds continued on Page 582)



## Hay, Straw and Feed

(Continued from Page 578)

Filed December 15, 1919. Serial No. 126,016. Published June 15, 1920. Registered September 28, 1920.

135,343. Stock, dairy and poultry feed. The Superior Feed Company, Memphis, Tenn. Filed January 30, 1920. Serial No. 127,787. Published July 6, 1920. Registered September 28, 1920.

135,196. Stock and poultry feeds. J. J. Badenoch Company, Chicago, Ill. Filed November 23, 1918. Serial No. 114,312. Published June 8, 1920. Registered September 28, 1920.

134,283. Stock feed. St. Albans Grain Company, St. Albans, Vt. Filed April 5, 1920. Serial No. 130,692. Published May 11, 1920. Registered August 24, 1920.

134,283. Stock feed. St. Albans Grain Company, St. Albans, Vt. Filed April 5, 1920. Serial No. 130,692. Published May 11, 1920. Registered August 24, 1920.

134,284. Dairy feed. St. Albans Grain Company, St. Albans, Vt. Filed April 5, 1920. Serial No. 130,695. Published May 11, 1920. Registered August 24, 1920.

135,466. Hog feed. International Sugar Feed Company, Minneapolis, Minn. Filed April 15, 1919. Serial No. 117,490. Published June 8, 1920. Registered October 12, 1920.

135,467. Poultry feed, chick size. International Sugar Feed Company, Minneapolis, Minn. Filed April 15, 1919. Serial No. 117,491. Published June 8, 1920. Registered October 12, 1920.

135,473. Feeds for poultry. Waldo P. Johnson, Chicago, Ill. Filed August 25, 1919. Serial No. 121,978. Published June 8, 1920. Registered October 12, 1920.

136,271. Dairy feed for animals. H. L. Halliday Milling Company, Cairo, Ill. Filed July 24, 1918. Serial No. 112,304. Registered October 26, 1920.

135,484. Stock and poultry food. Maritime Trading Corporation, New York, N. Y. Filed August 19, 1919. Serial No. 121,813. Published June 8, 1920. Registered October 12, 1920.

## NEW FEED BRANDS

New feed brands recently published in the *Official Gazette* of the United States Patent Office include the following:

"E.G.S. BRAND CHICK-N-RELISH" poultry feeds. E. G. Smyth Company, St. Louis, Mo. Filed August 24, 1920. Serial No. 136,434. Published December 7, 1920. See cut.

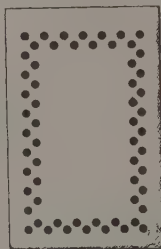
"MacX" stock feeds. MacX Feed Milling Company, Clinton, Iowa. Filed September 27, 1920.



Ser. No. 136,434.



Ser. No. 137,672



Ser. No. 128,242.

Serial No. 137,672. Published December 14, 1920. See cut.

Animal feed products. B. L. Sessum, Memphis, Tenn. Filed October 12, 1920. Serial No. 138,242. Published December 14, 1920. See cut.

## SUDAN GRASS IN THE UNITED STATES

The Department of Agriculture has issued a bulletin outlining the history and behavior of Sudan grass since its introduction into this country from Africa. Sudan grass is now being successfully grown in nearly all parts of the United States. It does not serve well either as a "money crop" or a soil improver, hence it may never find a permanent place in regular crop rotations. It has, nevertheless, a very important place in the farmer's second line of defense as a catch crop which can be planted to give satisfactory returns when conditions have brought failure to other hay crops.

Sudan grass is replacing Millet as the premier catch crop in many localities because of its ability to produce a fair yield and a high quality of hay under conditions of low rainfall, its rather short growing season, and its ability to thrive on a wide range of soil types. Large yields of Sudan grass are obtained only on good soils, but the grass fails completely only on cold, poorly drained land.

Sudan grass produces heavily. In California under irrigation it has made yields of 9.8 tons of field-cured hay an acre, when Alfalfa produced but 8.3 tons under like conditions; it ordinarily yields about the same as Alfalfa under irrigation in the Southwest, but Sudan grass gives its full crop in three cuttings against the four or five required for Alfalfa. It is the only grass yet found which in this

part of the United States ranks as the equal of Alfalfa in point of yield and quality of the hay. Its record in this respect has led to its use in "patching" old Alfalfa fields when the stand of Alfalfa has been destroyed. In the southern great plains, where there is a low rainfall, Sudan grass grown without irrigation will yield from one to three tons of hay to the acre.

There are certain parts of the United States where the Department of Agriculture considers it unwise to depend on Sudan grass for hay. This is true of the strip of territory 200 miles wide along the northern boundary; the regions of high altitudes in the Western States; and also most of Florida and a narrow strip of land along the Gulf Coast. Low temperatures prevent success with the grass in the first two regions named, and disease is the limiting factor along the Gulf Coast. In a majority of the Central and Southern States, however, climatic and soil conditions are favorable to Sudan grass.

## THE ST. LOUIS HAY MARKET

BY S. F. LARRIMORE

The situation in the St. Louis hay market as to the 1920 crop has been far from satisfactory to anyone in the business, and the many and various troubles that have arisen from time to time have been the means of considerable losses to the grower, and dissatisfaction to everyone else. With the shortage of bale ties, and then the shortage of cars, the grower was compelled to hold his hay that he would have shipped if possible, causing a shortage of hay in the market, and producing fictitiously high values to prevail. When the car situation cleared up sometime later, and the bale tie supply increased, a heavy movement of hay to the market followed, causing a heavy decline in the prices, and bringing about further dissatisfaction.

With this decline in prices, receipts diminished and more steady prices ruled for most grades. It seems that the shippers as a whole have not been willing to accept this new lower price, and are holding their hay for advances, which it is feared they will not be able to realize. This is the usual dull period of the year on hay of all grades, and more hay is being offered for sale, making it difficult to understand how it would be possible for any price advances to come about, at least during the immediate future. The principal demand so far has been from the local trade, the natural territory, the South, being largely out of the market on account of the cotton depression.

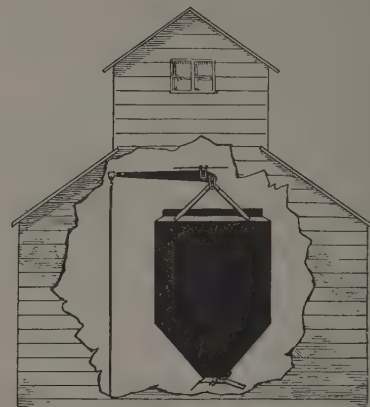
Alfalfa hay is in pretty much the same situation as all other grades. Just at present the market is over-supplied, and there is little demand from the Alfalfa millers, due to quiet in the feed market. There was a light early movement due to shortage of cars and bale ties, causing high prices which slumped when the rail and bale tie situation improved. Unless the cotton growers of the South can market their product, it is difficult to see how the situation can improve for some time, as that section is the principal market of St. Louis.

Alfalfa is grown in large quantities throughout Missouri and contiguous territory, particularly in North Missouri and throughout the Missouri River bottoms. High freight rates have prevented many shipments from Idaho, Colorado and other western territory from coming into St. Louis, and unless rates are reduced there is little hope of any hay receipts from that section. Reports have it that several of the roads have made rate reductions. However, if the rates do come down, there will be heavy shipments to market, with a resulting price decline, so it is rather difficult to see just how there will be any benefit. While St. Louis market prices have not been fully satisfactory to shippers, they have, on the average, been better than in other markets, and a large portion of the shipments from this section has been handled through this center.

The market on Prairie has been dull during the past season, values being too low, compared with other grades of hay. The increasing use of motor trucks in all sections has had a decided tendency to decrease the consumption of hay, the largest local consumers being the stockyards. The better grades of Timothy, Alfalfa, and Clover hays are in excellent demand in this market, as St. Louis is the natural supply center for the South and Southeast, besides having large Alfalfa mills here, and the Eastside stockyards, which are large consumers.

One of the hay experts on the Merchants' Exchange expressed himself as follows regarding the present outlook: "Receipts of hay recently have been moderate in amount, consisting principally of Timothy, Clover and Clover Mixed hay, with scant offerings of Prairie and Alfalfa. Timothy hay market is firm on the better grades of Timothy, which are in excellent local request. The medium and lower grades are quiet but steady. The movement of hay is light, and demand is much improved, although as yet the shipping outlet is very light. We do not look for an improvement in values, but anticipate a steady market, basis of present prices."

"Light Clover Mixed hay is steady on No. 1, which is in excellent local request. The medium grades are quiet but steady. Heavy Clover Mixed hay is steady, but offerings are moderate and de-



Settlement or Swaying  
of Your Elevator  
Can't Affect the  
Accuracy of Your

BIRD SHIPPING  
SCALE

Let your elevator sway!

Let its foundation settle!

Let the elements warp and  
twist its timbers!Let climatic changes come  
and go!

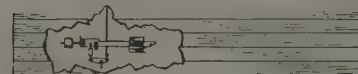
Regardless of all these changes, a Bird Shipping Scale in your elevator will continue to weigh as accurately as it did the day it was installed.

The Bird Scale hangs like a pendulum in your elevator. It is absolutely self-aligning. This insures absolute accuracy of weights at all times.

Railroads object to shippers' weights because they claim that automatic scales with their sensitive mechanisms are constantly being drawn out of true by dirt, dust and out-of-level conditions in country elevators. Also because they are not properly supervised.

The Bird Shipping Scale overcomes these objections which are most significant to country elevator men, because in the accuracy of his weights lies his hope of getting paid for all the grain he ships.

The Bird Scale itself requires no supervision.



The  
Strong-Scott Mfg. Co.

413 So. Third Street  
MINNEAPOLIS



mand fairly good. Pure Clover hay quiet but steady; offerings are moderate, and demand fairly good at quotations.

"Alfalfa market is steady, with offerings light, but demand is only fair, the trade being well supplied, although there is a good inquiry for reshipment on basis of present values, and the St. Louis market can readily absorb liberal receipts of Alfalfa at present values. We have no hesitancy in advising liberal shipments of Alfalfa, if same can be shipped here to advantage on basis of the quotations.

"The Prairie hay market is strong and higher. There is a scarcity of Prairie; in fact, there has been no Prairie on the market for several days, and high prices will be paid for anything offered. Would advise immediate shipments of Prairie hay."

## KANSAS CITY HAY ASSOCIATION ELECTS

BY R. S. BROWN

Trade in hay was only fairly active the past few weeks and, despite moderate receipts, prices for the more important grades generally followed a lower trend. Demand was confined chiefly to the upper grades which represented only a moderate proportion of the offerings. Shippers, representing scattered interests, were the most dependable buyers, with inquiry coming chiefly from the South and the Southeast. Most of the hay shipped out the past two weeks has gone in those directions. Local retailers and dairies bought limited amounts, due to the fact that stocks in most cases are still liberal and to the fact that all other forms of feed-stuffs are cheap also. The lower grades of hay, which at times formed a burdensome supply, were not especially wanted and were the main factor in imparting dullness to the general trade and in weakening the list of prices.

The supply of Alfalfa was the lightest in many months and quality was lacking at all times. Very few cars arrived grading up to No. 1 or better. There has been a strong demand for the upper grades showing anything like good color, but other offerings, brown and coarse stuff, was neglected at all times. Tame hay has also been relatively scarce, with trade conditions about the same as for Alfalfa.

Shipments of hay from Idaho and other points in the extreme West are expected by Kansas City dealers this month. A reduction in freight rates by the Union Pacific which went into effect December 24, will give much relief to producers in this section of the country. The reduction amounts to about \$5 a ton for most shipping points. Private trade reports say that farmers in Idaho have large amounts of Alfalfa which they have been unable to ship on account of unfavorable freight rates and the general stringent financial situation. It is estimated that the state has close to 1,000,000 tons cut and stacked in the irrigated districts.

The live stock situation is being watched closely at Kansas City. Cattle men are not buying heavily at present, despite the attractive prices at which feeders and stockers are offered and consequently the demand for hay is not up to expectations. The unsettled condition of all markets and of the money market in particular are the main disturbing influences. A moderate revival in demand is expected in the near future.

In the past few weeks Alfalfa hay has been quoted steady to \$3 a ton lower and Prairie has declined 50 cents to \$1. Lowland Prairie and Midland Prairie have been about unchanged. Timothy has dropped \$1 to \$4 and Clover has generally been unchanged to \$1 lower.

Receipts in December were 3,263 cars, a decrease of 1,233 cars, compared with a year ago. Arrivals in 1920 set a new high record for this or any other hay market, 46,810 cars, an increase of 8,568 cars over 1919 and 13,514 more than in 1918.

M. C. Campbell, president of the Campbell-Durbin Hay Company, heads the Kansas City Hay Dealers Association for the coming year. Mr. Campbell has advanced through the posts of second and first vice-president; and he has been serving as acting president for the past six months, since the retirement from the hay business of the chief executive of last year during his administration. Other officers of the association are: First vice-president, John Mackey; second vice-president, Bert Sheldon; directors for two years: B. F. Tyler, W. H. North and B. N. Huffine. The Arbitration Committee consists of J. C. Glover, J. D. Cole and J. C. Kerr.

Mr. Campbell has been one of the most active and aggressive members of the Kansas City Association since he entered the business with the organization of his company in 1913. He had previ-

ously, for several years, been employed by a local hay firm. Among his recent responsibilities, was the handling, with B. N. Huffine, of hay matters at Washington, as representing the industry in Kansas City. Mr. Campbell is a persistent advocate of practical and firm-handed employment of organization machinery for the upbuilding of the industry, and much of the very useful work in raising standards in this market is due to his efforts.

"The prime object of the Association is to improve conditions in the industry," he said. "The Kansas City Association has in the past few years undertaken to protect its trade with country dealers more than ever before, by requiring the fulfillment of contracts, and enforcing honesty among all dealers. We have tried earnestly to bring the hay trade to a high level, and we think we are succeeding.

"The Association has already undertaken work regarding freight rates on hay, which we will prosecute vigorously. We are starting a campaign into the consuming territory, to show the effects of the present rates on the movement of hay, and the ultimate effects on the interests of those districts, particularly the extreme southeast. There is sure to be a very serious handicap to live stock feeding in those districts, because of the almost prohibitive freight rates from the producing territory. Unless adjustment is made, the people of some territories may have to dispose of work stock; they may have to import greatly increased amounts of dairy products, and they will be affected gravely in other respects."

Mr. Campbell has many practical qualities that promise a successful administration; and his fellow dealers are particularly proud of their executive, because he is bringing to the hay industry, a professional and technical education of more than ordinary scope. Mr. Campbell completed the course in chemical engineering in the Kansas State University—and also completed the course in law. Ill health prevented his following a professional career; and the hay business has brought him not only health but success.

## NEW YORK HAY PRICES RECEDE AFTER ADVANCING

BY C. K. TRAFTON

Immediately following our last review the hay market was slightly stronger temporarily. It was plainly evident that many buyers had been stubborn and had held off too long. Consequently their stocks had been reduced to a decidedly low plane. It was obvious that many buyers had been greatly disappointed because the receipts had continued light instead of increasing as they had forecast. For a long time many buyers had been thoroughly convinced that prices for hay were bound to fall to much lower levels in keeping with the big declines in other lines. Many insisted that \$35 per ton for No. 1 Timothy in large bales was in their judgment a top notch figure, while others entertained lower views, contending that \$30 would be sufficient. But it soon became evident that farmers and country shippers held entirely different opinions as the receipts, instead of increasing, continued moderate or small, and consequently when buyers made an effort to replenish they found it difficult to secure No. 1 at less than \$40.

After this demand was satisfied the market became dull again, which created absolutely no surprise as practically everyone concerned realized that trade in all lines is invariably slow just before or during the holiday season. At this time practically no one cares to buy more than sufficient to meet urgent daily requirements. Of course, this being the time for annual stock-taking, virtually every dealer is willing to permit his stocks to run down as low as possible. Therefore toward the end of December it was exceedingly difficult to obtain reasonable bids, and consequently values were unsettled and somewhat doubtful with a slightly weaker undertone, although after all the decline was insignificant, because the receipts continued small. The fact is, advices from the interior created the impression that farmers and country shippers were still comparatively strong in their views and unwilling to sell excepting in a limited way at the reduced bids.

Following the turn of the year the market was in a general sense exceedingly narrow and disappointing to practically everyone concerned, although, of course the unexpected decline was no doubt satisfactory to many buyers. As a matter of fact, the downward tendency, while a source of surprise to conservative members of the trade, and especially receivers, was not apparently a source of gratification to buyers. At least, they showed decidedly little interest and continued to buy in a most sparing way. It must be admitted that this was not generally anticipated by unbiased observers because they appeared prepared for greater activity. This expectation was based largely on the fact that receipts have been exceedingly light, while buyers have been holding aloof, and therefore they assumed that stocks in the hands of distributors and consumers were reduced to a low plane.

For a short time immediately after our last re-

view the market for straw was slightly stronger as receipts were inadequate, but subsequently the offerings became larger and with demand poor all of the advance was lost, and more, too.

## PROGRESS IN FEED MANUFACTURING

BY R. W. CHAPIN

(Continued from Page 506, December issue)

About twenty years ago scientists in various countries had worked out or formulated certain rough feeding standards which were designed to be used in the mixing of rations for animals. They were based largely on the digestible analyses of different feeds. A large amount of data had been collected based on experiments abroad and here, and there being no other way to roughly figure rations these figures were treated more or less as gospel, and, no doubt, were of great value in getting a better understanding of what animals require for maintenance, growth and production.

Some years ago Dr. Babcock called attention to the practical demonstrations which proved that the words protein, fat and carbohydrates did not mean very much or else there were other vital factors to be considered in feeding animals. We now know he was right and the science of animal nutrition had almost to discard the old method of studying feeds and start on an entirely new basis.

To quote from Prof. Hart of Wisconsin, not verbatim, but as nearly as I can recall his remarks—"The computation of rations by the so-called digestible methods, is no longer believed in by think-



R. W. CHAPIN

ing men. In the light of modern protein chemistry our knowledge of the protein requirements of dairy cows is in as confused a state as our knowledge of the protein requirements for human nutrition. We insist that the set nutritive ratio for milk production is fallacious scientifically." In other words, our old text-book methods were very crude and not at all dependable. They were not thought of very highly by the successful business farmer, who would rather believe his eyes than a text-book, and as some one has said "logic is not so convincing as experience or known facts."

The farmer's income is so low that he cannot usually afford to take many chances. Years ago the investigations and experiments of the Connecticut Station showed a great gain in narrowing the ration or increasing the percentage of protein but it was many years before farmers could be induced to do it. Just about this time people began to learn how to feed animals right or nearly right and feed manufacturers began to make feeds that would fit the animal. These were called balanced rations and have been so called more or less ever since, although there is no such thing as a balanced ration, so far as any one knows yet. However, we call a balanced ration one that is as well balanced as any one knows how to do it.

As will be pointed out later, mixed feeds were found to be not only economical but resultful. Perfect or imperfect they were a great improvement on the average farm practice and the satisfaction of those who purchased them hastened their steady

(Continued on Page 584)

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736 Live Stock Exchange      Kansas City, Mo.



## FIELD SEEDS

(Continued from Page 579)

dle the great volume of trade when once it loosens up. The company asserts that the slump in the seed trade in the past few months has been the worst in the history of the business. The outlook for the future, however, is believed much brighter.

"White Clover and Timothy have enjoyed the best demand of all the seeds," the company reports. "The receipts of White Clover are light, the quality is good and the prices range from \$43 to \$49. Red Clover is firmer, with receipts light and the demand improving, while quality is good and prices range from \$18 to \$22. Alsike is steadier with receipts light and prices holding from \$18 to \$25. Receipts of Timothy are light and the price is holding from \$6 to \$7. Alfalfa is firmer with prices ranging at \$17 to \$19."

"Only the farmers who are hard pressed for money are selling their supplies of seeds," declares the North American Seed Company. The company finds that very few of the farmers are selling and the rest are holding on tight with a view to getting higher prices. Notwithstanding this reluctance of the farmers, the company reports a very nice trade for the past six weeks with business picking up steadily and the inquiry growing from time to time.

The company believes that with farmers refusing to sell and with the demand for seeds getting stronger from day to day, it is more than likely that higher prices will have to be paid to get the farmers to unload. Seeds are a bargain at present prices and should be bought, the company declares. Quotations are reported by the company as follows: Red Clover and Alsike sell at \$17 to \$21, White Clover is dull at \$30 to \$40, Timothy sells at \$6.50 to \$7.50, Montana Alfalfa ranges from \$22 to \$24, and Kansas and Nebraska Alfalfa sells generally from \$18 to \$22.

### CLOVER SEED RULING HIGHER.

"Market advanced to \$14 level early in the week," say Southworth & Co., in letter of January 8. "There was considerable profit taking on the bulge, which was only natural in face of the recent big upturn. Offerings were well absorbed on the decline. Some fresh investment buying and short covering. The future trend of the market will depend largely upon the attitude of Mr. Farmer. Should he sit tight prices could easily go higher, but could also

sell off on any general selling. Receipts continue light. Shipments exceeding receipts by a thousand bags.

"We have had numerous reports from Ohio, Indiana and Michigan regarding the Clover situation. They state that offerings of the cash article are very light, and that if the dealers have any seed they are not willing to sell at the present prices. It looks as though much of the Clover that has been marketed to date has been hedged or has found its way to Toledo. New York reports imports of Clover 936 sacks.

"Alsike slightly higher in sympathy with Clover, although cash Alsike lost its big premium after the December option was out of the way. Most of the receipts are off grades of inferior quality. At the present time there is practically no demand for this character of seed, and for this reason it is selling at very wide discounts.

"Timothy easier. Most of the trade in the deferred futures. Stocks are large. Will the spring demand be sufficient to reduce them considerably? Receipts this week included 600 bags of new prime. New York reports exports of 800 bags."

### NEW YORK SEED MARKET IMPROVES

BY C. K. TRAFTON

The market for field seeds finished the old year in relatively strong fashion and with practically all concerned extremely optimistic in their views. During the early part of the month the generally unsatisfactory conditions noted in our last review were still in evidence and prices were still on the down-grade, reaching the lowest levels of the year. The recovery in the closing days of the month and early in the new year was virtually complete, the general average of quotations showing little change in comparison with those ruling a month previous. If the hopes of many traders are realized after this report is written, the quotations actually ruling when this paper reaches the reader will doubtless show substantial gains over those prevailing a month ago.

The most noteworthy feature of the late improvement was the striking increase in the demand for Red Clover. Not only have the small dealers in the East displayed active interest, but numerous large inquiries have come direct to the seaboard from points in the West and Middle West. It was unfortunate that distributors here were unable to take full advantage of this quickened demand as supplies on spot were extremely small and it was impossible to buy cheap seed for future shipment from Europe. It was pointed out that French farmers, having secured big prices for their seed last year, were strong financially and were decidedly unwilling to sell at the prices offered them by French exporters. The latter reported that it was almost impossible to secure definite lots, and hence they were generally offering in small lots only at 15½ to 17 cents c. i. f. New York, for fair average quality. Owing to the unsatisfactory outcome of their dealings with some American merchants last year many of the French houses are reluctant to ship on terms of payment against documents in this country, preferring to have the American buyer assume all risks and obtain letter of credit for payment before shipment. Imported seed is quoted at 19 to 22 cents in large lots and 24 to 25 cents in

small lots, according to quality. Domestic seed is quoted from 22½ to 24½ cents in large lots. Several fairly large lots were received from France, totalling 1,040 bags.

Alsike has been inactive, but has generally maintained its premium of roundly 7 cents over Red Clover, as stocks here have been extremely small and offerings from the West have been scarce. Because of this big premium over Red Clover, buyers have continued to give the latter the preference. Exports during the month included one large lot to Copenhagen, 3,255 bags, also 144 bags to Rotterdam and 50 bags to Hamburg.

Alfalfa developed a much stronger tone late in the month. Although free stocks were supposed to have been fairly large at the outset, they moved rather steadily into distributing channels, and toward the end of the month it was ascertained that the better qualities of Alfalfa in this market had been absorbed by large western buyers.

It was stated that considerable seed that had been shipped here from the Continent and found to be unsalable had been re-exported to the point of origin. Because of these facts it was found that stocks here were by no means as large as had been anticipated. It is extremely doubtful if any cheap seed can now be picked up on the seaboard. The domestic variety is quoted at 20 to 22 cents and the imported at 16 to 20 cents, according to quality. French shippers have been offering sparingly and the price asked, 17 to 18 cents c. i. f. New York, was too high to permit of business. In fact, although the South American quotations were more attractive, 15 to 15½ cents, they likewise failed to result in business. A shipment was reported of 550 bags to Denmark.

Timothy has likewise strengthened considerably, as there have been no signs of liberal offerings from any quarter, while wholesalers have been trying to cover their requirements in anticipation of future demand from smaller dealers. They have discovered a striking absence of such "bargains" as they could have had in November at about 7½ cents, the present spot quotation being 7¾ to 8¼ cents. Exports during the month totalled close to 4,500 bags, including 1,900 to Germany and 1,900 to Scandinavia.

Other exports during the month were: 500 bags of Red Clover to the United Kingdom, said to have been re-exported; 1,400 bags of Meadow Fescue, mainly to Glasgow; about 970 bags of Bluegrass; and roughly 1,500 bags of other grasses, chiefly to Scandinavia.

Imports during the month included: 480 bags of Sunflower seed and 372 bags of Rapeseed from Argentina; 540 bags of Vetches; about 1,950 bags of Rye Grass, and 300 bags of other grasses.

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MINNESOTA



## For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

### MACHINERY

#### FOR SALE

One Strong & Northway Four-Roll Feed Mill, in A-1 shape. Price \$200. ELIZABETH INDEPENDENT ELEVATOR, Elizabeth, Minn.

#### FOR SALE

No. 39 Clipper Grain and Bean Cleaner, only used six weeks. Will sell on easy terms or trade for car. SAMUEL HEIMAN, Maxwell, N. M.

#### FOR SALE VERY CHEAP

A 100-ton 50-foot Fairbanks Railroad Track Scale, with all steel for setting same. All in perfect condition. C. E. BIRD & CO., Minneapolis, Minn.

#### FOR SALE

Two No. 11800H Union Special Machine Company's Bag Patching and two No. 45 K 74 Singer Darning and Patching Machines. All in good operating condition. PURCHASING AGENT, P. O. Box 989, Buffalo, N. Y.

#### OIL ENGINE FOR SALE

60-horsepower Fairbanks-Morse.  
50-horsepower Otto.  
25-horsepower Fairbanks-Morse.  
50 other sizes.

A. H. McDONALD, 550 W. Monroe St., Chicago, Ill.

### ELEVATORS AND MILLS

#### WANTED

To hear from owner having elevator, mill or other property for sale. Give cash price and particulars. JOHN J. BLACK, Chippewa Falls, Wis.

#### FOR SALE

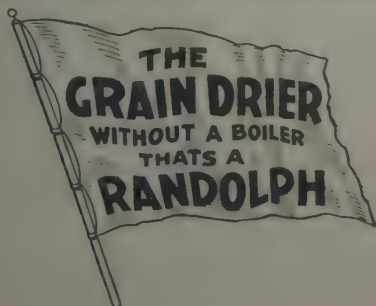
Rolled oats factory in eastern Iowa. Capacity 40,000 lbs. per day. Plant in good shape and ready to run. For particulars, address C. P. EVANS, 928 E. Iowa Ave., Iowa City, Iowa.

#### FOR SALE

Seven Iowa elevators. Will handle 1,200,000 bushels this year. No crop failures. Price \$75,000. IOWA ELEVATORS, Box 12, care "American Elevator and Grain Trade," Chicago, Ill.

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Capacity 200,000 bushels. Steam and electric power. In good condition. Excellent distributing point, transit privileges, on direct line from Minneapolis and St. Paul, five railroads; repair shops insure plenty of cars. Can be bought for less than 50 per cent of what material would cost today. MINNESOTA, Box 10, care "American Elevator and Grain Trade," Chicago, Ill.



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Elevator at good grain point in central Illinois for North Dakota land. ILLINOIS, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

#### MILL FOR SALE

All new machinery and accessories for a complete sifter mill with a daily capacity of 30 to 35 barrels, ready for delivery. Results guaranteed. G. J., Box 11, care "American Elevator and Grain Trade," Chicago, Ill.

### BAGS

#### FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags; burlap, cotton, sheeting, or paper for car lining, etc. Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

## Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

#### RAILROAD CLAIMS COLLECTED

WE COLLECT RAILROAD CLAIMS covering loss or damage to grain, flour and mill products. Do not overlook delay, shortage, decline in market and deterioration claims. We have an extensive organization for handling these matters. References: Any Minneapolis bank or the Northwestern Miller. We are members of the Grain Dealers National Association and the Traffic Club of Minneapolis. This service is furnished on a percentage basis. No collection, no pay.

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#### ADDRESSOGRAPHS, MULTIGRAPHS, ETC.

We buy, rebuild, sell for half price, guarantee for one year. OFFICE MACHINERY COMPANY, 22-M Quincy St., Chicago, Ill.

#### WANTED, TO BUY

Second-hand copy of Taylor's "History of the Board of Trade." Will pay \$10. PROF. J. E. BOYLE, Cornell University, Ithaca, N. Y.

#### FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

### SITUATION WANTED

#### POSITION WANTED

By a grain elevator man. Have had 12 years' experience operating grain and feed elevators in Chicago. Unquestionable references. EXPERIENCE, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

## BOOKS FOR GRAIN DEALERS

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ROPP'S CALCULATOR, new and improved edition, with complete grain tables, and other invaluable discount and stock tables. Price .....\$1.50  
ELWOOD'S GRAIN TABLES, a standard everywhere in the grain trade. Price.....\$1.50  
ROBINSON'S TELEGRAPHIC CIPHER, revised and enlarged. Price.....\$1.75  
UNIVERSAL GRAIN CODE, and Feed Mill Supplement. Price .....\$3.00

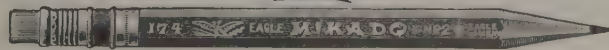
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Price \$1.80 per doz. boxes; \$1.00 per lb.  
(Discount quoted upon request.)

We also manufacture a very effective Gopher Exterminator.

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Hales & Edwards,  
Riverdale, Ill.  
Murray Elevator,  
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Calumet Terminal Elevator,  
Chicago, Ill.  
American Malze Products Co.,  
Robey, Ind.

Universal Oats Co.,  
Dixon, Ill.  
Central Elevator Co.,  
Pittsburgh, Pa.  
J. W. Denio Milling Co.,  
Sheridan, Wyo.  
New Era Milling Co.,  
Arkansas City, Kans.

Shotwell Mfg. Co.,  
Chicago, Ill.  
Lyon & Greenleaf Co.,  
Millersburg, Ind.  
F. W. Stock & Sons,  
Hillsdale, Mich.  
Iowa Corn Products Co.,  
Des Moines, Iowa

BLAYLOCK & KNAPP,  
STEEL CONTRACTORS

Monadnock Block Chicago, Ill.  
Factory 1223-25 Belmont Avenue



## Hay, Straw and Feed

(Continued from Page 581)

growth and popularity, which was accompanied by a marked improvement in quality and efficiency.

The average mixed feed of today is vastly better than that of 15 or 20 years ago. Science has made great strides during that time. Science has aided the manufacturer. It is not too much to say that without the great supply of by-product feeds, including those from the starch factories, oil mills and other industries, there would have been no such expansion of the dairy industry. Back, if I remember rightly, in 1883, when one of the first dairy census was taken by *Hoard's Dairyman*, it was shown that dairying was quite an unprofitable industry; that cows were on such a low plane of production, fed so poorly and cared for so badly, that they did not pay a fair return for the investment and labor involved.

I started in the feed business soon after this time. I can remember the improvement that took place in the dairy industry as the use of by-product feeds increased. Very early it was found necessary to have feed and fertilizer laws in this country to make competition fair and to prevent misbranding or fraudulent practices. These laws were primarily designed to prevent adulteration of straight feeds which, of course, is misbranding. Some products, such as cottonseed meal, have so wide a range of composition, either naturally or due to varying added amounts of hulls, that it was especially necessary to indicate the amount of nitrogen or protein that was in the bag.

The farmer has never been much of a chemist.

He buys products by names and not by analyses. It is true that now he has some rather loose notions of what an analysis means. About the only concentrate that I know of that is bought by analysis is cottonseed meal. I am positive that no one buys wheat bran, gluten feed, seed meal or hominy meal either by analysis or on account of analysis. The natural variations in these feeds are overlooked or ignored.

It is very difficult to formulate one general law to govern so many different kinds of feeds. To require the analysis of a mixture of corn, oats and barley, known as chicken feed, is one of the most useless things in the world because whoever fed a chicken by figured analysis? Such a law only means more revenue for the chemist and more work for the Control Officials. I might say that the same is practically true of wheat feeds. They are only branded with an analysis to comply with the law. A standard analysis is almost invariably used or at least can be, because nobody cares and nobody believes it anyway.

As I once before said this Association inspections of bran are made and published months after it has been fed up, which is very much like a post-mortem, but the law is there and you enforce it. It is true that a great deal of bran on the market is more or less a mixed feed containing other materials than wheat products, but this condition has practically always prevailed, by which I mean the bran of today is about the same as it was 30 years ago, even if it isn't all pure wheat product.

It was found necessary to pass an ingredient law for compound feeds to make competition fair and also to protect the purchaser. I will not say that the compound feed of today is very much different

than before the laws were passed, but the feeds are now truthfully branded, which is something that could not be said then and this makes for fair competition. I doubt if very much improvement is needed in our present feed laws, for the reason that concentrates cannot be adulterated without detection, and compound feeds are truthfully branded and sell almost entirely on their results—at least the second time they do.

The feed manufacturer is no different than any other kind of a manufacturer. He is there to serve the public and give them exactly what they want. They won't buy anything but what they do want. This is no brief for condoning any form of deceit or for complimenting inefficiency, but you have to give a man an article at a price he will pay, which means as good as you can afford to make it for the price.

The feed industry is no different from any other. There is just as much range in the quantity of soap, automobiles, shoes, cloth and a thousand other things as there is in feeds, and in every case the purchaser usually buys some certain brand because it suits him or the price is the best he can or will pay.

I claim that chemistry at the present time does not provide sets of standards that can be entirely satisfactory for such complex articles as mixed feeds or soap. Chemistry is very useful and we could not get along without it, but it has its limitations for labeling purposes. When you buy vanadium steel for an automobile you apply a chemical standard and possibly a physical one for tensile strength, but when it is made into an automobile the chemical analysis of an automobile is absolutely of no use to you.

(TO BE CONTINUED)

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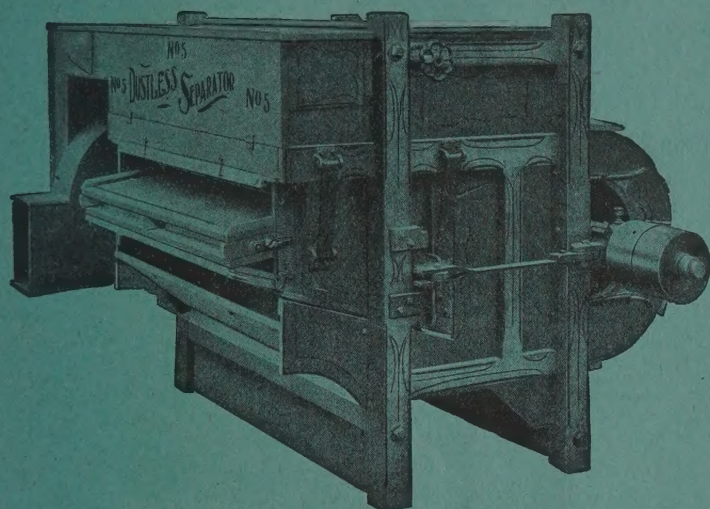
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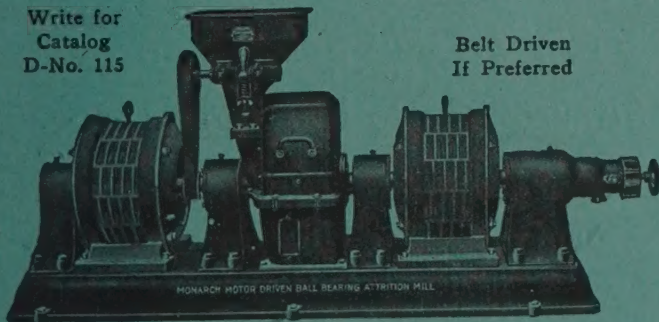
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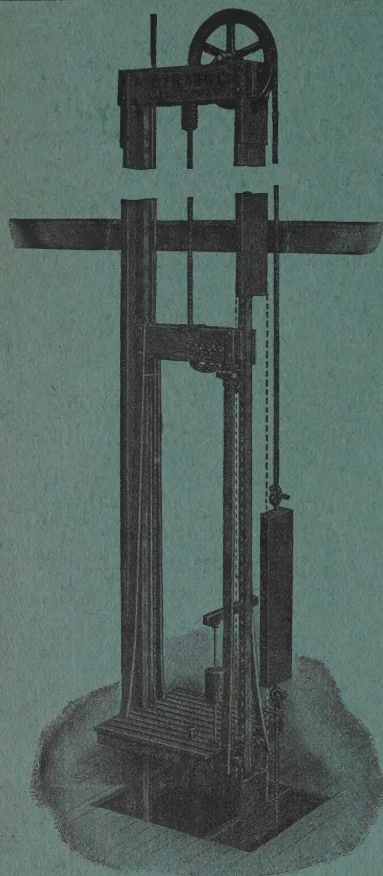
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